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# *The* NATION'S SCHOOLS

DEVOTED TO THE APPLICATION OF  
RESEARCH TO THE BUILDING, EQUIPMENT  
AND ADMINISTRATION OF SCHOOLS

VOL. V  
No. 5

MAY  
1930



Published by THE NATION'S SCHOOLS PUBLISHING CO., Chicago.



*The requirements of students who have practically achieved their full growth is answered by the 16-inch EXPEDIO closet, C10204.*



*For adolescent children this SPEEDEX closet, C11041 is indicated. It is 15 inches high and has an elongated rim opening.*



*For children in the early grades, Crane Co. designed this 13½-inch high SANETO Jr. closet, C10675.*

## Medical authorities recommended this design

The most modern of school toilets are these. Medical authorities found that health habits, particularly those of children, are affected by the height of closet bowls. So Crane Co. built these three types. Each one in height and proportions, conforms to the requirements of a specific group.

The newest ideals in sanitation inspired their construction, vigorous syphon-jet action, "water controlled" flushing—

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THE UNIVENT IS THE CONNECTING LINK BETWEEN OUTDOORS AND INDOORS



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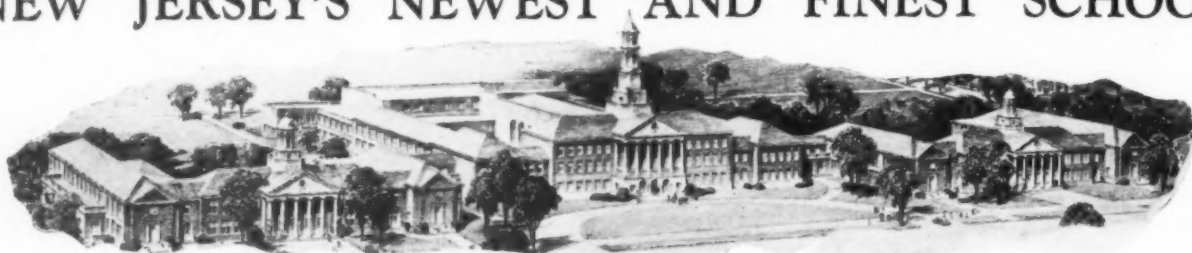
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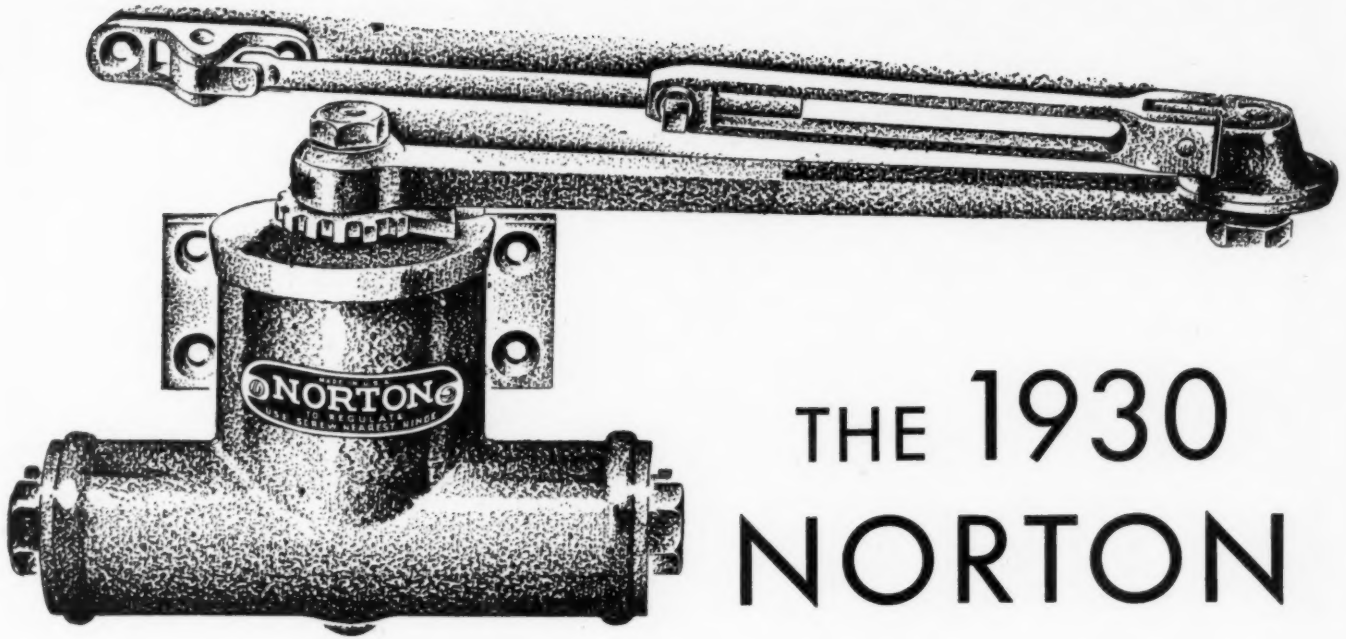
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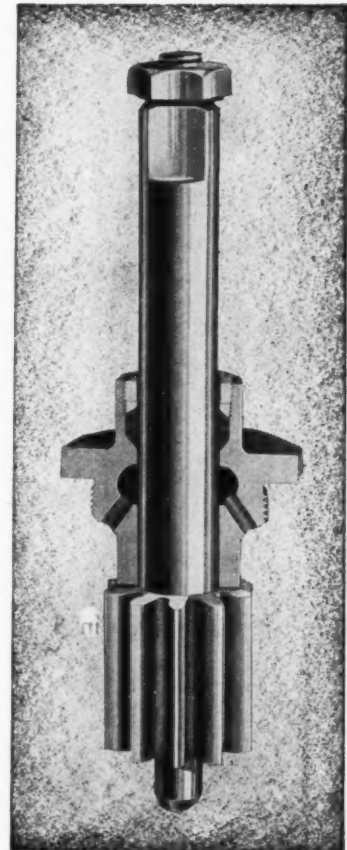


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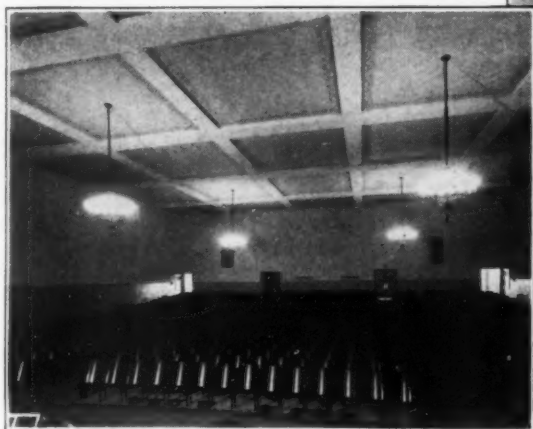
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*Acousti-Celotex in the ceiling of the Audubon Jr. High School, Los Angeles, California, quickly absorbs distracting noise . . . providing a quiet library for reading and study. Note attractive decorative effect of the Acousti-Celotex tiles.*

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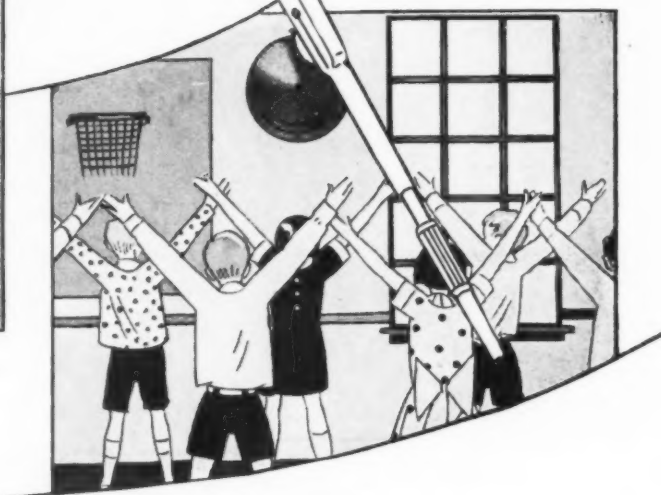


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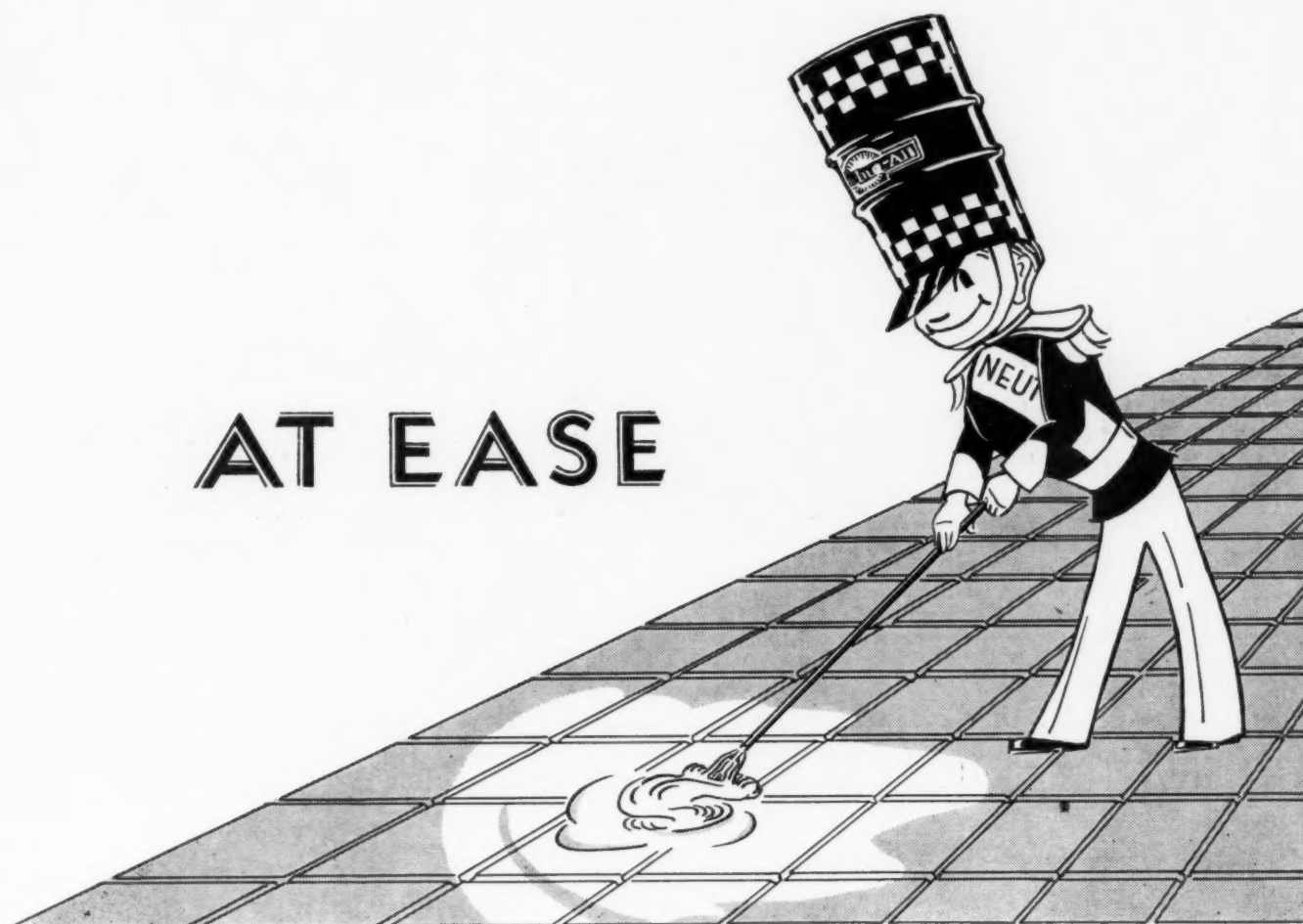
Alberene Stone Company, 153 West 23rd Street, New York.  
Branches at Chicago—Cleveland—Pittsburgh—Newark, N. J.  
— Washington, D. C. — Philadelphia — Boston — Rochester,  
N. Y.—Richmond.

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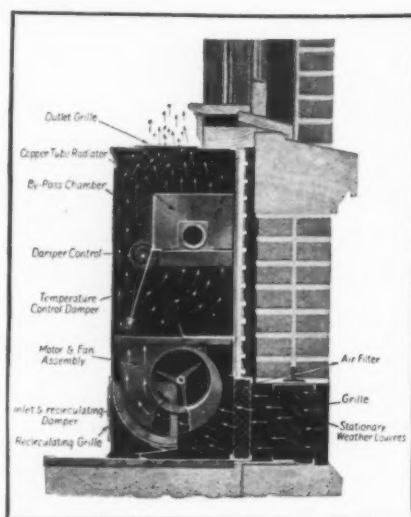
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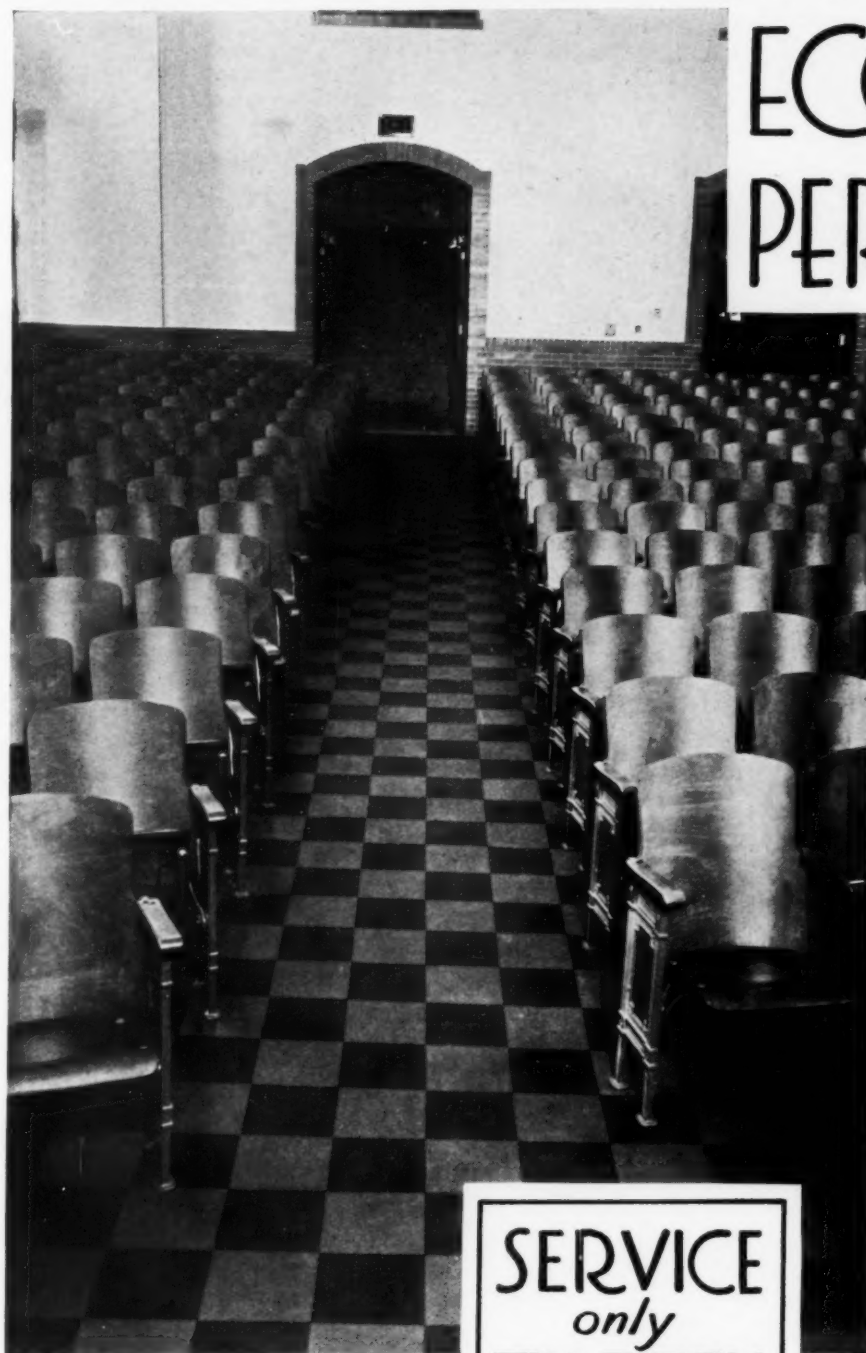
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(Patented)

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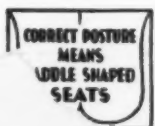
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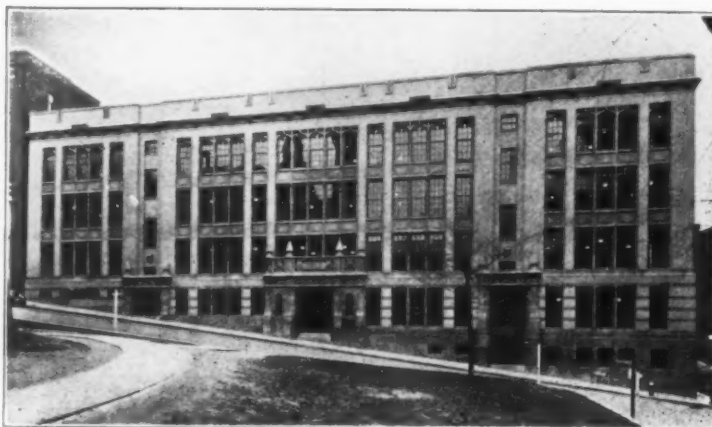
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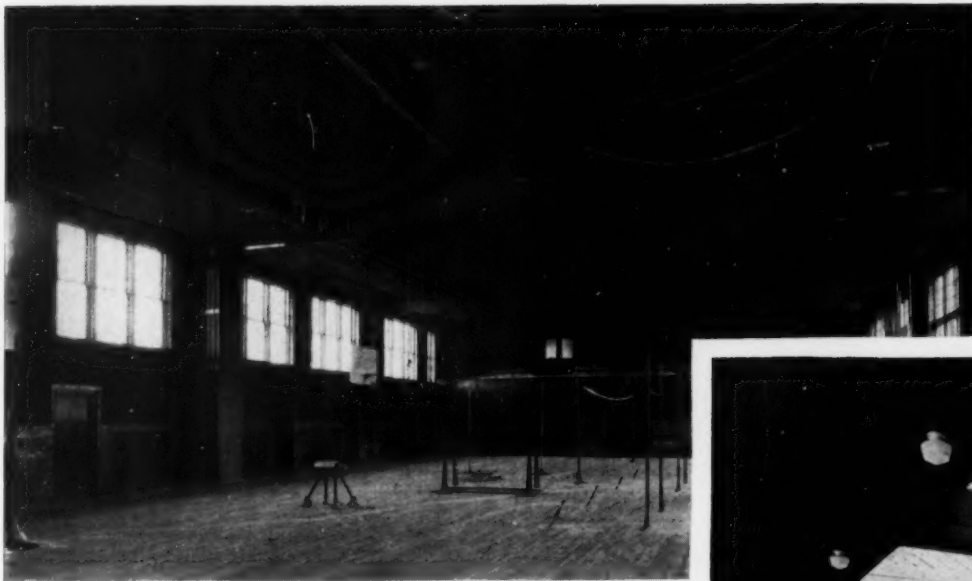
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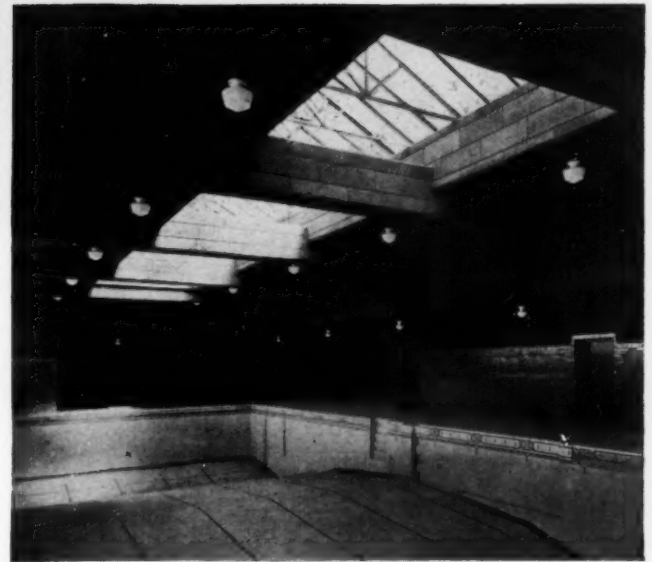
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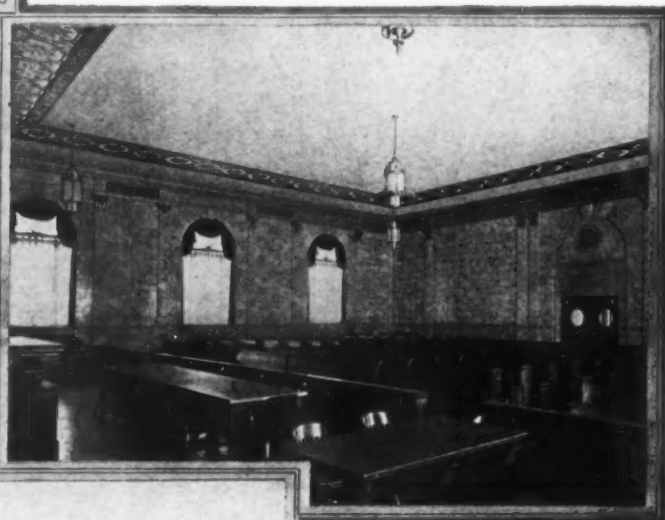
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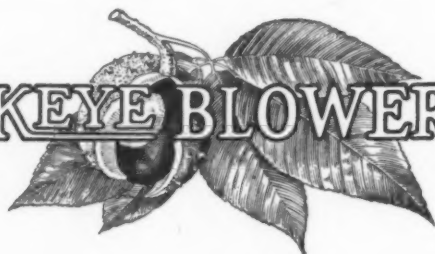
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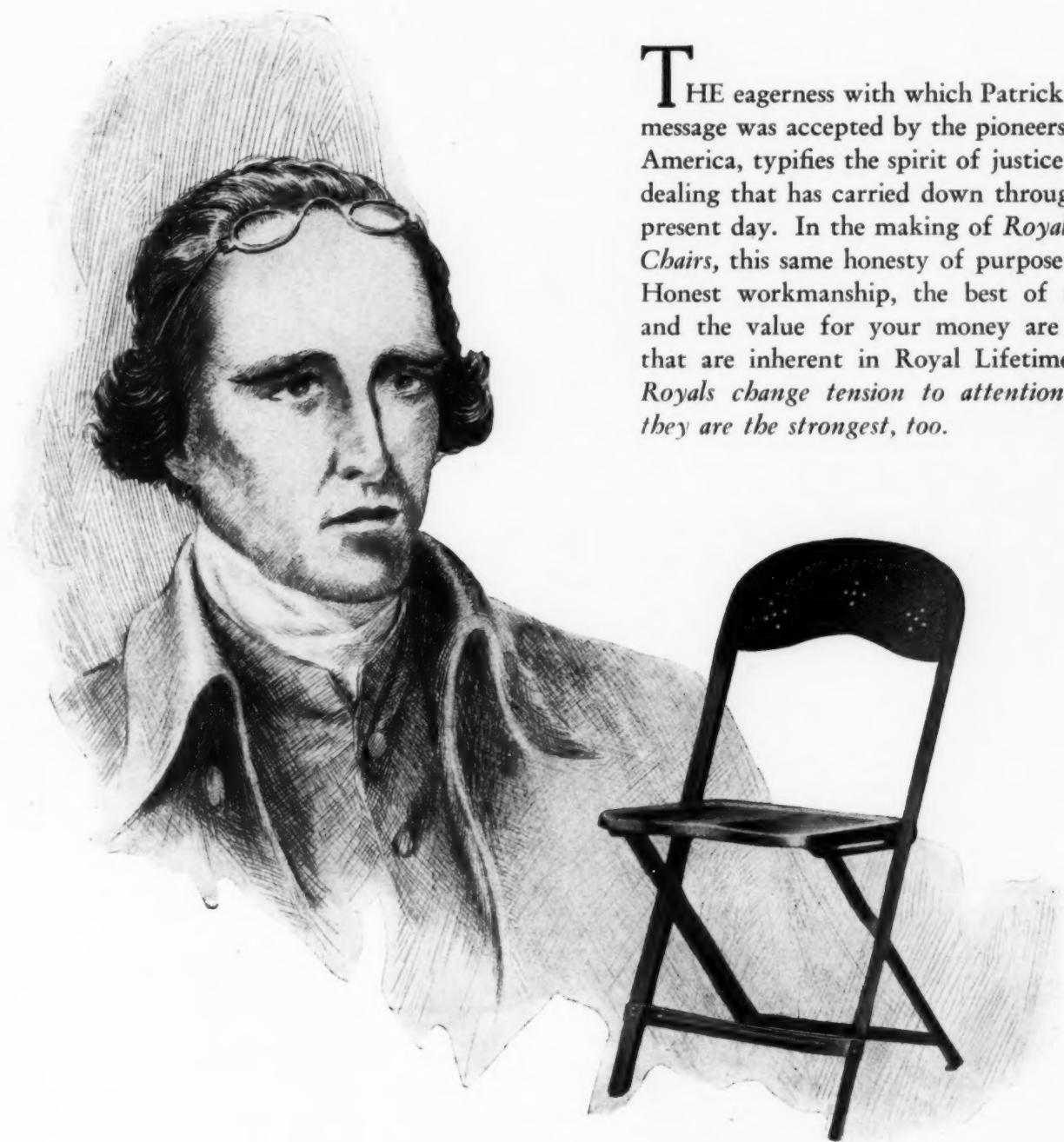
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# The NATION'S SCHOOLS

DEVOTED TO THE APPLICATION OF RESEARCH TO  
THE BUILDING, EQUIPMENT AND ADMINISTRATION OF SCHOOLS

VOLUME V

MAY, 1930

NUMBER 5

## What Attributes Contribute Most to a Superintendent's Success?\*

*Whenever people work together there is a dynamic relationship, an interaction, and since the person in the administrative position is more or less at the center of the group his work has the possibility of large returns*

BY EDWIN C. BROOME, SUPERINTENDENT OF SCHOOLS, PHILADELPHIA

THE term "school executive" embraces a wide range of possibilities. It includes not only superintendents of public schools, but also college presidents and deans, supervising principals, directors, supervisors and officials in charge of business affairs, school property and other phases of the educational enterprise of any community.

The professional training of these educational executives is of sufficient importance to justify a separate treatise in each case, but we shall confine our discussion to the subject of the professional training of the public school superintendent.

One way to determine what are the important considerations in such a training is to ascertain from successful superintendents of extensive experience what professional equipment and what personal qualities seem to contribute most to a superintendent's success.

It is true that such an inquiry can bring only a symposium of opinion. Also it is difficult to secure an agreement, even among superintendents themselves, as to what constitutes success in a superintendent of schools. Nevertheless, although aware of these and other objections, we did make such an inquiry. Fifteen names of school executives who are generally conceded to be successful were selected. All but one replied to our inquiry. The superintendents represent cities ranging in popu-

lation from fifty thousand to a million. One state superintendent was included. Three deans of schools of education who had previously been superintendents of city school systems, and who therefore have been on both the receiving and the presenting end of the line were also included, on the ground that it would be interesting to hear from several who had been both doctors and doctored.

### *Winning Cooperation Is Important*

The opinions expressed in the replies to our inquiry showed surprising agreement as to the most important abilities that a superintendent should possess.

1. Ability to understand people, to win their confidence and secure their cooperation in worthy enterprises.

This is the most frequently mentioned ability in the replies, expressed in varying terms such as, human touch, human understanding, ability to make contacts, the democratic attitude, power to enter understandingly into human relationships, sense of public needs, ability to cooperate and guide, understanding and liking the average human being, common sense and tact, poise and understanding.

To be sure, this ability is partly native and partly acquired. Just as some can never become artists in painting, so some can never become artists in handling people. But given a modicum of

\*Address given at New York University, March 1, 1930.



native artistic ability, the power can be improved, whether it is in the art of portrayal or in the art of human understanding. Probably experience is the best aid to improvement in the power of human understanding—one's own experience, critically interpreted and evaluated, and the experience of others in similar situations. Possibly sufficient material drawn from the successful and unsuccessful experience of superintendents in their dealings in human relations might be isolated for purposes of study in a university course. One superintendent writes: "I believe this is a quality in which one can be trained. Some day I may be courageous enough to attempt to give a course upon this subject."

#### *Cultural Background Is Desirable*

2. A second quality frequently mentioned by our correspondents may be generally described by the term background—a background of scholarship and culture.

One superintendent who is recognized as a master of the technique of school administration laments the fact that he lacks the advantage of broad and intensive scholarship. He also deplors the fact "that there are so few superintendents in this country who can lay claim to any marked degree of erudition or genuine scholarship." By erudition and genuine scholarship he doubtless means the quality of mind, the breadth of view, the catholicity of interest, the power of appreciation, and the exactness and completeness of knowledge that distinguish the man who is simply trained. The sort of education here implied may be gathered, perhaps, while one is practicing the profession of school administration, but it will be less embarrassing for future superintendents in their associations with the college president and other intellectual leaders of the community, if, before being accepted by a school of education for the pursuit of technical courses in school administration, they should be required to present evidence of such fundamental education as is described above.

3. There was also general agreement expressed by our correspondents that professional breadth of view is paramount to training in the technique of supervision, child accounting, curriculum construction, measuring school buildings or educational statistics.

Such professional breadth of view as would be cultivated by thorough courses in social psychology, sociology, including business administration, economics and philosophy, on a graduate plane, should be prescribed for future school superintendents. If one can devote only a year to graduate study, it seems preferable to devote it to the

study of subjects such as those just mentioned.

4. The study of current educational practice was strongly recommended.

This may be pursued in two ways, first, case study in the university of material from the field, and second, through the study of and contact with actual practice in the field in association with school systems that represent the most approved procedures. Most large universities are so located that such opportunities for actual practice are available in near-by communities. We require of teachers in their preparation, not only the critical study in the normal school of educational movements and practices, including observation in a model school, but practice teaching as well. Why not apply the same idea to the training of superintendents and give them some experience of superintending in the field? Some successful efforts in this direction have already been made.

5. A large part of a superintendent's success is due to his ability to present a case convincingly to his board and his community.

This involves the ability to arrange matter properly, to use illustrations, graphs and statistics and to prepare bulletins and reports that will be read. This tends to motivate and make meaningful the study of educational measurements and statistics. The superintendent in the field uses statistics for the purpose of solving problems only, and not as exercises for filing or publication or for satisfying the requirements of a thesis.

Such a course would be virtually a course in educational brief making. This is, perhaps, the most important part of a superintendent's work.

#### *Selling the Schools*

Analogous to the function of presenting a case convincingly is that of selling the schools to the people. This involves a successful technique of utilizing parent-teacher associations and other community organizations, rotary and other service clubs, and especially the local press. It involves as well the training of the teachers and principals to be effective and perennial salesmen of the ideas and ideals that their schools represent.

The university might profitably organize much of the technical training of the superintendent around the problem of preparing superintendents to perform skillfully these two most important functions of presenting a case convincingly and of selling the schools to the people who pay the bills.

6. The improvement of instruction through intelligent supervision is generally recognized as a most important responsibility of the superintendent of schools.

Essential in the preparation of a superintendent

is a thorough training in supervision and in the organization of effective supervision. Schools of education, of course, do provide for such training. The suggestion, however, that most of this training should be under successful superintendents, supervising principals and supervisors from the field, is worthy of consideration. Also observation in good school systems would add greatly to the effectiveness of this training.

#### *Handling Personnel Problems*

7. Another important need is training in the handling of personnel problems, that is, dealings with members of the staff, with principals and teachers, janitors and other officials, even with board members.

Such functions as the selection, promotion, assignment and transfer of teachers and principals occupy a large share of a practical superintendent's attention. A course in personnel problems might properly occupy an important place in the professional training of a superintendent of schools.

8. It is unnecessary to suggest to a group of school administrators that the responsibility of laying out a school plant, reading plans and specifications, selecting furniture, apparatus and textbooks, and making budgets, now largely, and in progressive systems, wholly, rests on the superintendent of schools.

Millions of dollars are wasted every year in school systems through the performance of these functions by untrained or inexperienced superintendents. Probably the best way to receive training to perform these functions is through an apprenticeship with a successful superintendent, under an arrangement with a university, although considerable preparation for the exercise of these functions can be given in the university by professors who have had successful experience with such problems.

9. Of late we have heard some differences of opinion expressed by university experts as to whether or not experience in teaching is an essential prerequisite for successful school administration.

If this question were put to 100 school superintendents, probably over 90 per cent would reply in the affirmative. It would seem obvious to them that a man must have some experience on what may be called the productive side of education before he can qualify to manage education; just as it would seem obvious to 100 judges that a man should have experience in practicing law before the courts before he could hope to occupy a judicial post. On the other hand, there are those who believe that the right kind of man can be

trained to become a school executive without an apprenticeship in teaching.

As is usually, the case, the truth probably lies somewhere between the two extreme points of view. An experience of several years of teaching of one subject, say mathematics, in a high school, may have so little relation to the general administration of a school system as to have little or no value in the way of preparation for executive work. It is conceivable, also, that the teaching of any subject in an unprofessional environment, without adequate professional supervision, may develop an attitude of mind and bad educational habits that would prove a handicap to one in an administrative position. It seems reasonable to assume, however, that a few years of experience in teaching, if under good conditions and constructive supervision, would be a valuable preparation for the superintendency. We must not lose sight of the fact that a large part of a superintendent's success, especially in his earlier years, is due to gaining the respect and confidence of the teachers, and teachers are likely to have more confidence in a superintendent who has been a success in the classroom than in one who has never taught school, however great his administrative ability may be.

10. Lastly, it is essential that somewhere in the course of training for the superintendency the future superintendent should acquire a comprehensive view of the enterprise of public education in its relation to the social, economic, business, industrial, political and religious life of the community and state.

#### *Seminar to Solve School Problems Is of Value*

He may have acquired the separate viewpoints established by the study of sociology, economics and philosophy of education, possibly as an undergraduate, but what he most needs is a coordinated view of the field. The practicing superintendent must, in the solution of his problems, utilize the resources of psychology, educational philosophy, economics, including finance, sociology, politics and science. It ought to be possible in graduate courses in our large universities to establish a seminar in the solution of problems of school administration through the combined utilization of these resources.

Such a seminar has recently been established in the graduate school of Yale University. This seminar enrolls approximately twenty-five students, and employs the services of from six to eight faculty members, each representing a different department. It follows a comprehensive, unified syllabus outlining the fundamental data and problems of educational philosophy, history,



psychology, sociology, curricula, instruction, supervision, organization, administration, financial support and legal control, to convey a unified understanding of the whole educational program, including the interrelation of its parts.

To quote Dean Holmes, of Harvard, the superintendent should acquire "the power to see a school system steadily and to see it wholly." . . . "This is very much more important than the technique of scoring school buildings or the details of any particular aspect of the educational enterprise, such as vocational guidance or the statistics of school attendance."

Such a unified understanding of the whole educational enterprise, we think, would be more effectively achieved by arranging such a seminar around educational problems, to the solution of which the combined resources of several departments would contribute.

In planning for the training of school superintendents one minor consideration should not be overlooked. There might properly be on the faculty of school administration at least one man who has achieved distinction as an actual superintendent of schools (as in law and medical schools). He might be of assistance to the students in their efforts to "see a school system steadily and see it wholly," as Dean Holmes suggests. Of course, he might require a larger salary than that usually paid to college professors. But we believe the expenditure would bear fruit in attracting to the university men who have already had experience as superintendents, and who desire to extend their equipment and training. Such a superintendent in the faculty should serve also as an inspiration to young students who are preparing for a career of school administration.

#### *Graduate Work Is Necessary*

A course of preparation for the school superintendent as suggested in this paper could not be covered in a year of graduate work. At least two and probably three years would be necessary. And why not? In many school systems three years of post high school training is required for the elementary teacher and four years for the high school teachers, and the time is not far distant when four and five years of post high school training, respectively, will be required of the elementary and high school teacher. Why not expect at least six or seven years of post high school study for the most important and most highly paid officer in the school system? When we cease to regard the city or county superintendency as a political job, the extent of training above suggested for the superintendent of schools will be the common requirement, and, we trust, will be

determined by statute in most of the states of the country.

It seems better, also, to define the qualifications for the office of superintendent of schools, above the holding of the bachelor's degree, at any rate, by the extent and character of the training than by degrees.

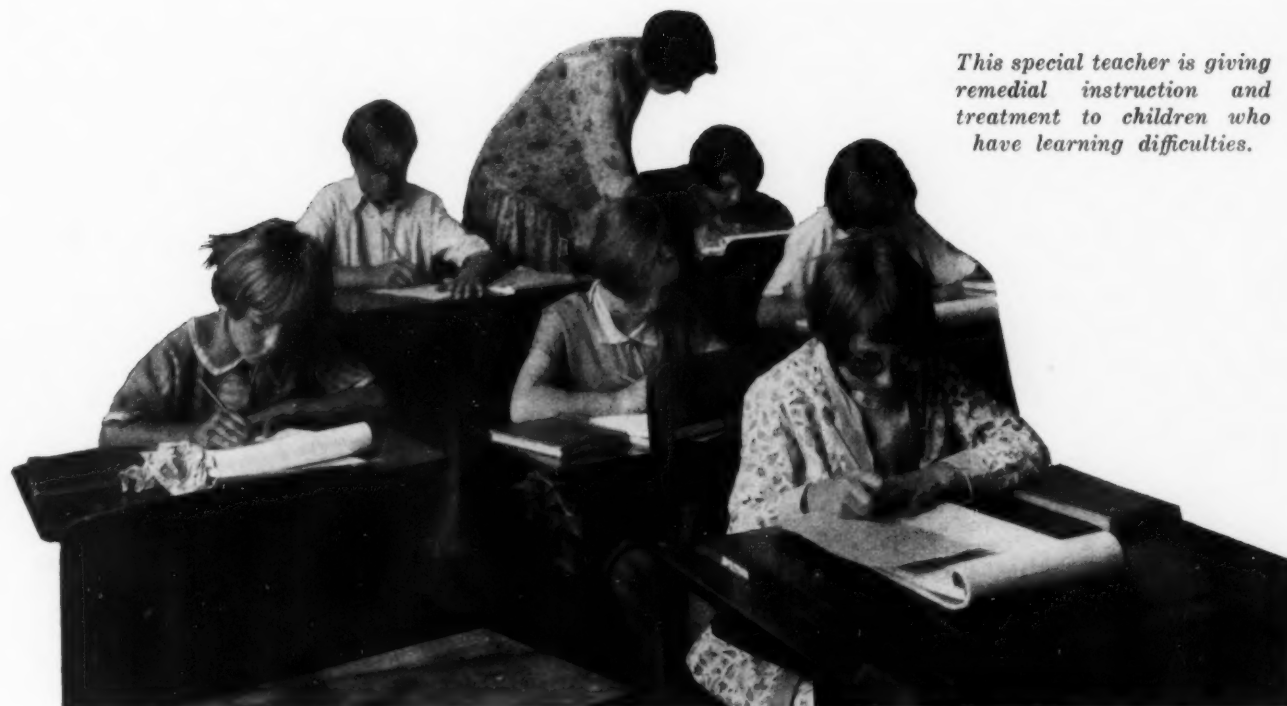
The degree of doctor of philosophy hardly seems appropriate for a school executive. If it is necessary that superintendents of schools secure graduate degrees, and boards of education and the public seem to be less impressed by them than they were several years ago, the degree of doctor of educational administration seems to fit the case better than the degree of Ph.D. Moreover, the traditional requirement of the preparation and publication of a thesis by the candidate for the Ph.D. consumes an amount of precious time, which, except in rare instances, is entirely disproportionate to the value of the product.

### A Study on Financing County Schools

A study of the financing of the schools of Lake County, Ohio, recently distributed in the county by F. H. Kendall, county superintendent, gives valuable information on an important subject that may be useful to other county superintendents. The salient points are listed in the *Ohio Teacher*:

1. Sources of revenue, chiefly from tax levies, county and local. Other revenues are interest from current funds, pupil tuition, income from school lands grants.
2. The 15 mills limitation. A board may include in its annual budget whatever expense is desirable, but the county budget commission may reduce the 15 mills tax limitation. However, the following items cannot be reduced by the budget commission: expense necessary to care for bonds and interest and sinking funds so far as these are not voted outside the 15 mills limit; a 2.20 mills levy plus the 2.65 mills county levy.
3. Levies outside the 15 mills limitation may be voted by the people for the following: current expenses, bonds or notes already issued or proposed for issue. Levies for current expense may be for one to five years.
4. Borrowing is prohibited, except that one half of the next semi-annual distribution may be borrowed within the fiscal year.
5. State aid. When a board has exhausted its resources and cannot operate the schools it may be eligible to receive state aid.
6. Buildings and lands are financed by bond issues approved by a 55 per cent vote.





*This special teacher is giving remedial instruction and treatment to children who have learning difficulties.*

## Translating the Testing Program Into Classroom Procedure

BY VERNON E. CHASE, DIRECTOR, BUREAU OF RESEARCH AND STATISTICS, FORDSON PUBLIC SCHOOLS, DEARBORN, MICH.

MUCH time has been wasted in the past in teaching children what they already knew and in neglecting to teach them what they needed to know.

It is a common practice in business and industrial circles to take, at periodic intervals, an inventory of the stock on hand. A similar inventory of the "stock of knowledge" that children bring with them to school that teachers may know where to begin and what to begin with, has found its way into the practices of many school administrators in recent years.

With the organization of the bureau of research in the Fordson Public Schools, Dearborn, Mich., there has been adopted the policy of taking an inventory of the subject knowledge and the learning needs of pupils at the beginning of each semester. The resulting information has enabled teachers to employ their time, as well as that of their pupils, to a much greater advantage than was possible before. The inventory of subject knowledge is accomplished chiefly by means of standard tests in reading, arithmetic, spelling, penmanship, and the other subjects found in the school curriculum.

An ordinary citywide testing program usually

results in the accumulation of many thousands of individual scores. This mass of raw data is largely meaningless unless and until it is treated statistically and graphically to show significant instructional conditions and tendencies. Before such treatment, the mass of data thus obtained may be likened to a photographic plate before developing. The character of the image it contains is unknown and invisible. Certain chemical treatment and manipulation must be applied to bring out the picture.

### *Bringing Out the Picture*

Many carefully planned testing programs have been carried out with meager and disappointing results because of failure or carelessness in "bringing out the picture" of instructional conditions which the mass of test data and reports contained and which the tests were intended to provide. The bureau of research, if such a bureau is maintained, is the agency through which this essential preliminary work of reducing the raw data and deriving from it significant facts and tendencies is best carried on. Not only this, but the bureau of research must present its findings in a simple, statistical or graphic form that is

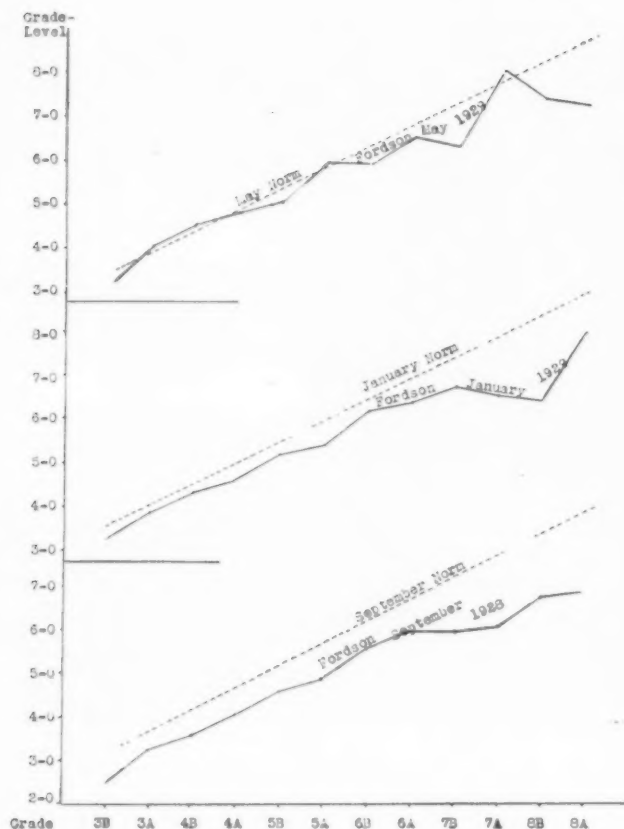


Diagram 1. Grade levels and progress of various groups in school system in arithmetic as determined by the Woody-McCall test.

easily, readily and correctly understood. Without this "picture," by which we mean the graphic and written analyses of test results, many of the benefits the classroom should receive from a testing program will necessarily be lost.

Three essential steps must be taken in the statistical treatment of test data before it can safely be assumed that the testing program is functioning to the fullest extent in the classroom.

First, it is necessary to reduce the test data to

terms that show systematic or general conditions. This step is illustrated in Diagram 1 which shows at a glance the level of achievement in arithmetic for a school system as revealed by nearly 27,000 individual scores obtained with the use of the Woody-McCall Mixed Fundamentals test in arithmetic.

The horizontal scale at the bottom represents grade groups as they actually exist in this school system. The vertical scale at the left represents the expected level of achievement as determined by Michigan<sup>1</sup> experience with this test. Therefore, to determine the grade level of any particular group in the system, as for example the September 5A group, a vertical line should be traced from 5A in the scale at the bottom of the diagram until it cuts the September progress curve. From this point of intersection, a horizontal line should be traced to the vertical grade level scale at the left. The latter point of intersection, 4-8, is the actual grade level of the September 5A group. It signifies that, in the use of arithmetic fundamentals as measured by this test, the average 5A pupil in this school system was on a level with the average Michigan child who was at Grade 4-8 in September, that is, eight months advanced in the fourth grade. Most groups, it will be observed, approached more and more closely to the expected norms as they progressed through the year.

Diagram 1 shows the progress that is being made from grade to grade; it shows where slow progress is taking place; how much improvement is taking place from semester to semester; how the city compares with established norms. This preliminary analysis points to certain general conditions that should have attention. For example, a plateau or area of slow progress is ap-

<sup>1</sup> Bergman, W. G., Michigan Grade Levels, Bulletin No. 98, Bureau of Educational Reference and Research, University of Michigan, 1927.

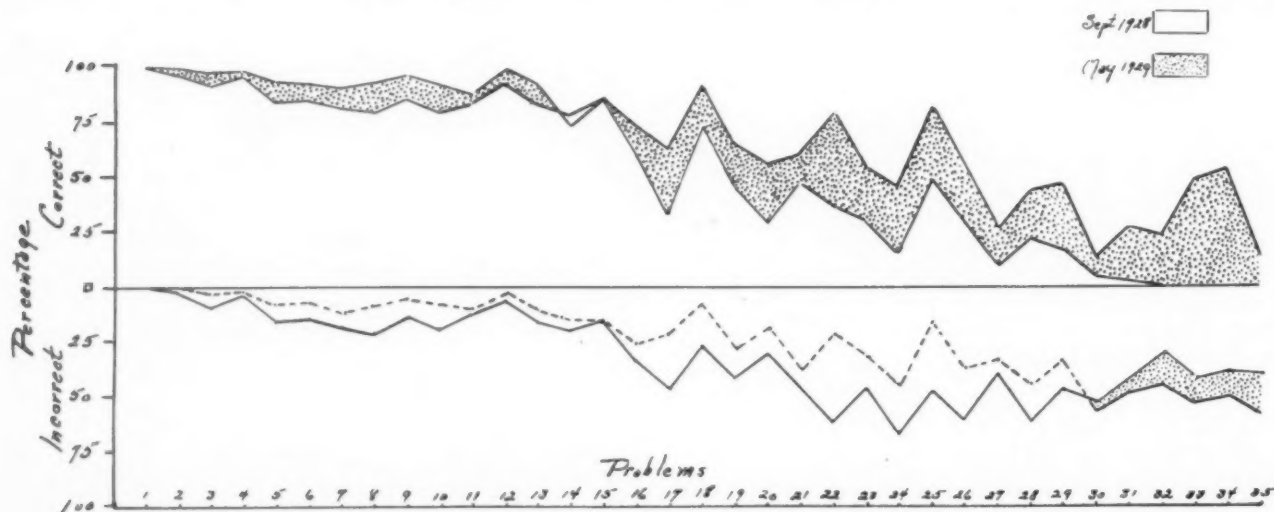
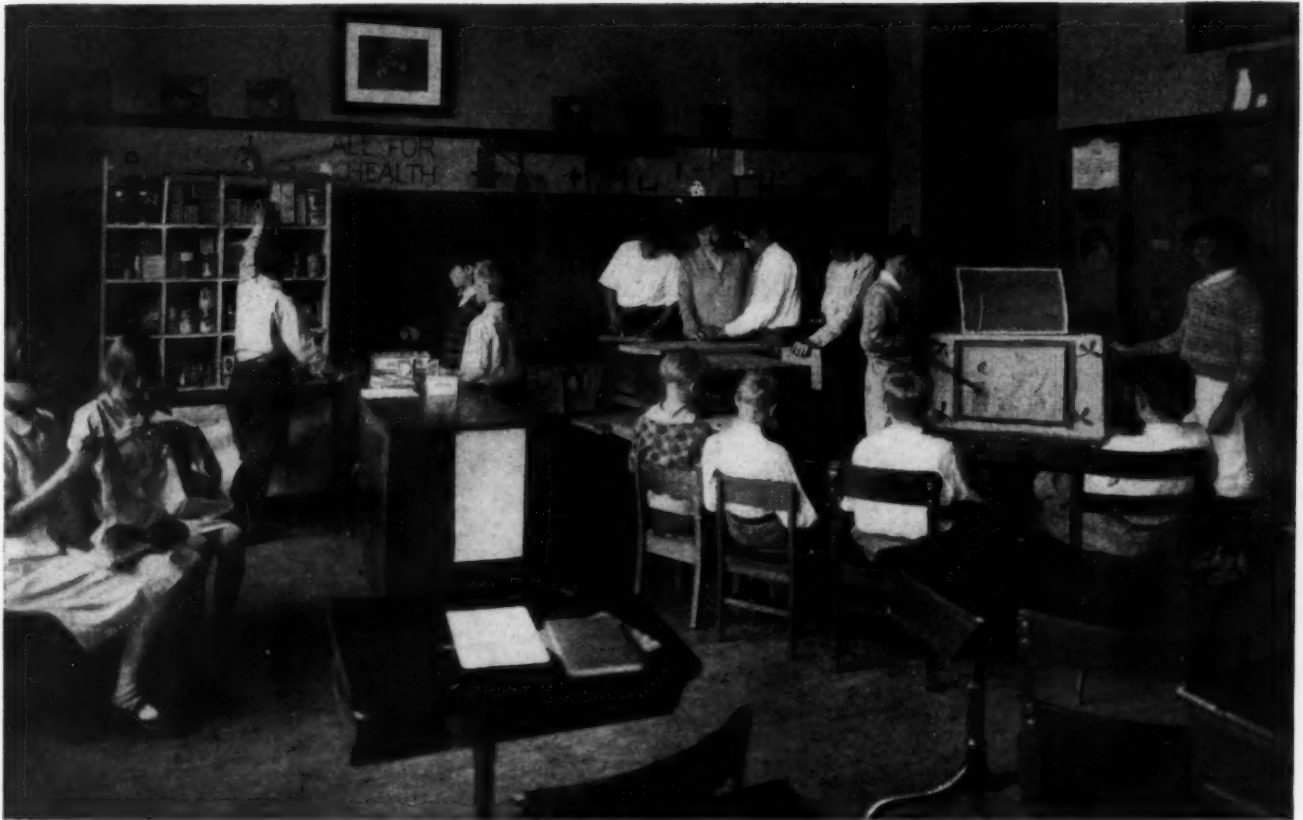


Diagram 2. This chart shows how pupils of Grade 5A performed on specific types of arithmetic problems found in Woody-McCall test.



*These Lincoln Class pupils are learning how to cooperate in overcoming difficulties and in doing useful work.*

parent in Grades 6 and 7. The condition appeared to be serious enough to merit special attention. That the efforts attending the discovery of this condition were noticeably fruitful seems evident from the change in the character of the May, 1929, curve.

#### *Group Diagnosis Is Essential*

Second, a grade or group diagnosis is essential. Diagram 2 is a detailed perspective of Grade 5B with respect to fundamentals in arithmetic as measured by the test that has just been described. The analysis, represented in part by this diagram, possesses an advantage not found in the one previously discussed. For example, while our first step reveals a number of important facts and conditions, it does not afford any clue to the reasons why these conditions exist.

The Woody-McCall test consists of thirty-five problems. These are referred to by number on the horizontal line below Diagram 2. The percentages of successes or failures for each problem are read on the vertical scale at the left, successes being shown above and failures below the zero line. For example, on problem No. 17, ( $2\frac{3}{4}-1$ ), 30 per cent of the pupils of Grade 5A succeeded and 47 per cent failed in September. The remaining 23 per cent did not attempt the problem at all. In May (see shaded area) 59 per cent succeeded with the same type of problem, 26 per cent

failed and 15 per cent did not attempt it. The narrowing of the band towards the right indicates increasing difficulty and consequently an increasing percentage of nonattempts.

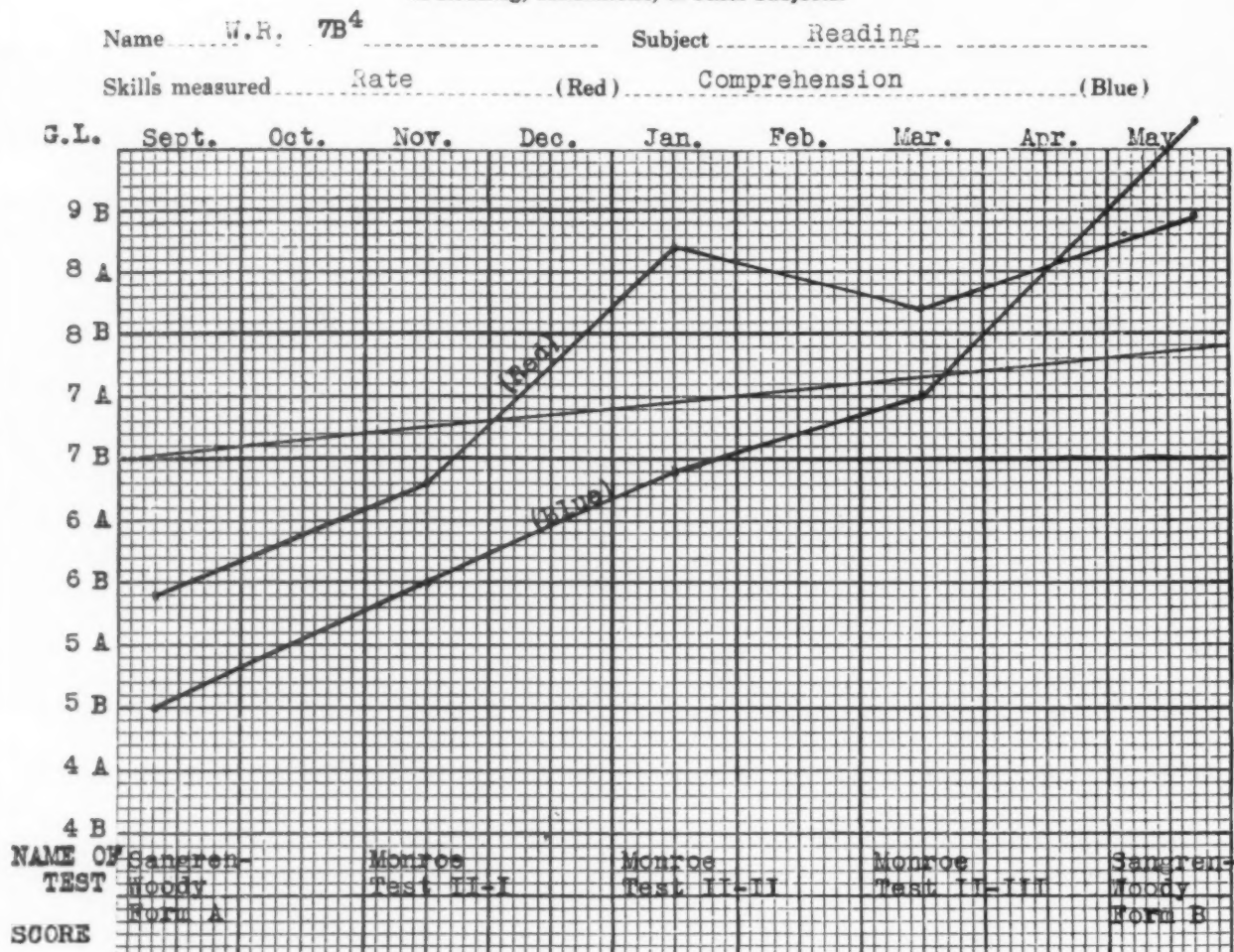
Now, reasons are important if any intelligent attempt is to be made to improve classroom procedure. Through step two we begin to discover some of the causes, to get an inkling as to the reasons why certain conditions are found. To illustrate: Diagram 2 shows that 28 per cent of the pupils in Grade 5A succeeded with problem No. 20 ( $\frac{1}{4}$  of 128) and 31 per cent failed on the problem, leaving 41 per cent who did not attempt it at all.

We have here three types of response to an elementary arithmetic situation, that is, an attempt terminating in success, an attempt terminating in failure and no attempt at all. Each has peculiar and important significance to the teacher and supervisor. It is obvious that this sort of analysis is subject to great variation and may be carried to almost any length desired. It is without the scope of this article to enumerate or discuss the import of the numerous problems which may at once be raised in this matter. Suffice it to say that the mere raising of these problems to a point where they command the serious attention of teachers and administrators may be considered a promising step in the direction of reducing waste and promoting a more efficient



### THE READOGRAPH PROGRESS CHART

For the use of pupils in measuring graphically their own rate of improvement and progress in Reading, Arithmetic, or other subjects.



**DIRECTIONS:** The first vertical column at the left headed G. L. is the Grade Level Column. Place the figure for the grade you are now in before the B at the lower left end of the heavy diagonal line which runs across the page. Before each of the other letters in the G. L. column place the figures for the other grades above and below the one you are in so that they will read consecutively from top to bottom. For example: Suppose you are in Grade 7B. Place a 7 before the B at the lower end of the heavy diagonal line. Then before each of the other letters place figures so that they will read in order from top to bottom: 9B, 8A, 8B, 7A, 7B, 6A, 6B, 5A, 5B, 4A, etc. Now suppose you wish to graph your progress during the year in rate and comprehension of reading. We will suppose that on the September test you score a grade level of 7A in rate and 6B in comprehension. Simply place a red dot where the 7A line crosses the September line for rate and a blue dot where the 6B line crosses the September line for comprehension. Do the same for the October, November, and other tests. By joining the rate dots with a red line and the comprehension dots with a blue line you will have a picture of your progress in reading during the year. This picture or graph will also show you at any time during the year what kind of practice will help you most to increase your reading ability.

PREPARED BY THE BUREAU OF RESEARCH AND STATISTICS FOR USE IN THE PUBLIC SCHOOLS OF FORDSON

Diagram 5.

expenditure of the time pupils spend in school.

Third, having made both a systemic and a group analysis, we are still without much information or means for dealing with the problem child, particularly with those cases of maladjustment who consume teaching time out of all proportion to their numbers.

It has been demonstrated that many chronic

failure cases and cases of maladjustment may be satisfactorily adjusted in their school life when causes of maladjustment are ascertained and appropriate corrective treatment applied. Certainly the school has not performed its full duty to such individuals until some attempt of this sort has been made. Diagram 3 illustrates a simple form of individual diagnostic chart which has been

# DIAGNOSTIC CHART

## FORDSON PUBLIC SCHOOLS

Bureau of Research and Statistics

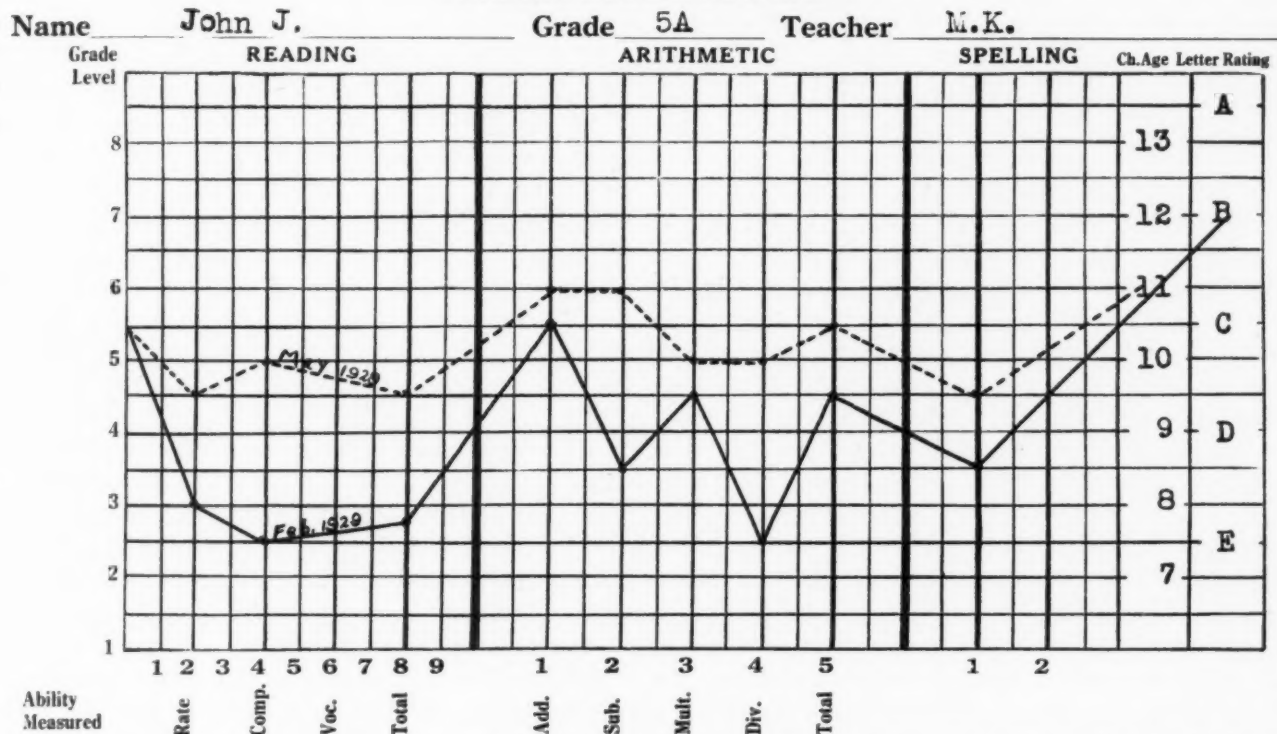


Diagram 3. The teacher is no longer compelled to rely upon opinion and guess work as to a child's learning ability. This profile of a pupil shows how well he can read, solve problems and spell; it also shows how much improvement he was able to make under special corrective instruction during a semester.

found practical and is growing in popularity and use among the teachers of this system. Such a chart provides an instructional profile of the individual from which many significant facts may be observed at a glance.

The diagnostic chart is to be interpreted in the following manner: John J., a pupil in Grade 5A, has been making unsatisfactory progress and has taken diagnostic tests to aid in determining the reason for this. These tests show him to be considerably below grade in certain specific abilities essential to success in reading and arithmetic. For

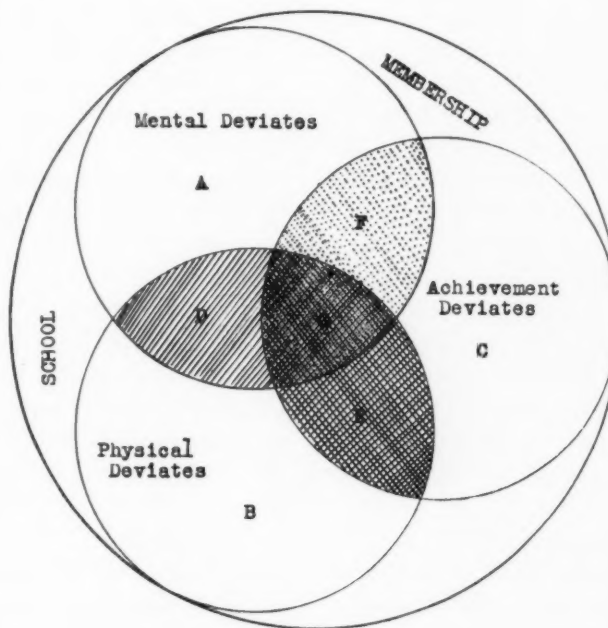


Diagram 4. The overlapping of mental, physical and achievement deviations of the children in a school system as revealed by selective examinations.

example, he is at a grade level of 3 in rate of reading, 2.5 in comprehension and 2.6 in vocabulary. In arithmetic he shows a fairly satisfactory mastery of addition facts but is weak in the other fundamental operations, especially division. His chronological age is eleven years and he has an intelligence letter rating of B, which indicates that he is capable of doing much better work. The dotted line shows the improvement that took place after four months of corrective treatment.

With compact, organized information of this sort brought to them

by the bureau of research, teachers, principals and supervisors are in position to make an effective drive upon the weak spots in the instructional fabric. The results of such a drive with respect to arithmetic may be observed by examining the May, 1929, curve of Diagram 1, the shaded portion of Diagram 2 and the dotted line in Diagram 3. It seems evident from these and similar results that teachers and pupils may profit greatly from a more exact and reliable knowledge of instructional conditions.

It is said that most failures in school are due to the fact that children are either attempting work too difficult for them or work for which they are not adapted. Undoubtedly, many if not most of the business failures in later life might be explained in the same way. It is of the utmost importance, therefore, that the traits and aptitudes of school children be carefully studied and analyzed in order that they may derive the greatest possible benefit from their school life. These traits and aptitudes vary widely with different children. This fact has long been recognized. Plato in the fourth century B.C. called attention to individual differences and to the fact that some individuals are better fitted to follow certain occupations than others. The work of the schools is infinitely more than teaching the child; it is finding out also what individual children need to be taught and how they should be taught.

#### *Determining the Needs of Individual Pupils*

It is not enough for the school to provide teachers, materials and equipment by means of which a child may acquire a knowledge of reading, arithmetic and the other subjects in the school curriculum. It is equally important that the school determine by some means more reliable than mere guesswork and opinion, the particular aptitudes, limitations and educational needs of the individual child. Only in this way may the school intelligently guide the child in his school career or aid him in strengthening deficiencies which, if neglected, may permanently impair the child's chances for success and happiness. Diagram 4 shows how the results of physical, mental and achievement tests combine to reveal causes of failure or slow school progress and to aid in classifying these cases into the proper groups for treatment.

The large circle in Diagram 4 represents the entire school membership. All of the children included in this circle receive, during the course of the year, three principal types of examinations: (1) mental tests through which mental and psychic abnormalities are detected; (2) physical tests through which physical and sensory defects

are discovered; (3) achievement tests through which the child's ability to master the various subjects of the school curriculum is ascertained.

As a result of the mental tests a certain portion of the children, represented by circle A, are found who deviate from the normal to such an extent that the child is seriously handicapped in the matter of social adjustment. Similarly, the physical examinations reveal a group of children, represented by circle B, who are handicapped as a result of physical or sensory defects. Circle C represents a third group of children who are not making proper adjustments because of learning difficulties.

#### *The Child Measures His Own Progress*

The overlapping of circles A, B and C clearly illustrates the fact that abnormal achievement or progress in school often directly implies a mental or a physical handicap, or sometimes both.

Anyone who has observed children at play knows that in the various play activities a measuring process is constantly going on. The child wants to know how well he jumps, runs or performs in other ways compared to others. Consciously or unconsciously, in all play activities, the child is measuring the skill, ability, strength or speed of himself or his group against that of his associates.

This normal tendency and desire to measure or compare oneself with others may be utilized by means of the readograph chart. This chart is given to the pupil who, by means of the standard tests that he takes, determines his own level of ability and traces his own progress in school subjects. Diagram 5 is an illustration of such a chart that was kept by a pupil in Grade 7B to chart his progress in rate and comprehension in reading.

The use of these charts demonstrates that, under proper guidance and stimulation, pupils enjoy measuring their own skill, ability and progress in school subjects as well as they do their ability to jump, run or play mumblety-peg.

Thus, through a well organized and well administered testing program which takes sufficiently into account systemic tendencies, group conditions and individual traits and differences, many of the salient and vital facts upon which the improvement of classroom procedure depends may be obtained.

Armed with adequate, reliable and easily intelligible analyses upon these different levels and with a sustaining array of facts and evidence the bureau of research is in a strategic position for performing much valuable and lasting service for the individual child and teacher.



# Changing Administrative Conditions for Vocational Education

*Changes of the last ten years make it possible to plan for schemes of vocational education in ways not thought of at the time the Smith-Hughes Act went into effect*

BY DAVID SNEDDEN, TEACHERS COLLEGE, COLUMBIA UNIVERSITY

THE most vital and troubling topics discussed among American educators are no longer problems of salaries or tenures or compulsory school attendance or lengths of rural school years; still less are they problems of methods of teaching, of classroom disciplines or even of coeducation. Everywhere the problems of curricula are those that are claiming attention. Back of these are problems of educational values. Back of these, though always somewhat vaguely, are problems of aims, purposes and objectives.

Herbert Spencer's question, "What knowledge is of most worth?" is the ghost that will not down. In fact, it haunts us now as a family of ghosts. "What knowledge, what habits, what attitudes, what ideals, what tastes and what skills are of most worth?"

Charles W. Eliot, one of the most conspicuous victims of the illusions of formal discipline, said in effect ten years before the commencement of this century: "It matters little what a youth studies; the effectiveness of his education depends on how he studies it." To-day there prevails in some quarters a school of thought, the teaching of which appears to be: "It matters little what children study or learn, provided they grow naturally, learn creatively and have an agreeable time through it all." And, of course, there still survives in a few quarters the ancient principle satirized by Dooley: "It doesn't matter what a boy studies, provided he doesn't like it."

## *Outlook Is Promising*

There are, however, many promising signs on the educational horizon that the next strongly marked development in educational philosophy will be hypotheses of functional coordination between ends and means much more concrete and policy determining than the abstract and often ambiguous formulations heretofore accepted.

Concrete theories of really functional educations of necessity will have to be based on fairly realistic and credible postulates of human values—that is, of the specific kinds of personal and

social needs for help which can be served potentially by particular kinds of learnings and other growths taking place in individuals under tutelage or otherwise. But such concrete theories will also have to offer convincing evidence or at least plausible hypotheses as to the functional values of the educational means selected or advised to meet the needs indicated, and that without the mysticisms once dominant under the concept of formal discipline or those others now aspirationally clustering around supposedly new concepts of child centered schools.

## *Needs for Vocational Competences*

Now, in making classifications of "social needs to be met," any social economist or well informed educator is certain to include "needs for vocational competencies," even though he may have doubts as to whether schools, private or public, are the most socially effective agencies to produce these competencies when other than the professional vocations are planned for.

Many Americans, laymen as well as professional educators, have for some years entertained two kinds of disturbing reflections: first, that many economic and other conditions have recently contributed to the development of really acute needs for more and better kinds of training and instruction for a host of vocations, which are now either without apprenticeship protection or are being victimized by degenerating systems of apprenticeship; second, that large proportions of educators have been, if not covertly hostile, at least apathetic towards proposed developments of particularized vocational schools to meet these needs.

These noncooperative attitudes of school men have been comprehensible and justifiable so long as it could be reasonably suspected that proposals to establish really effective vocational schools would take from the money, the pupil time or the other supports of general or nonvocational education. Because of confused counsels and sociologic misunderstandings in connection with the

progress of schools into those areas of child life lying between the ages of fourteen and eighteen, it is possible that the academic hostilities towards many of the proposals for vocational education that were advanced during the first quarter of the present century were somewhat justified.

### *Changes Are Many*

But the last decade has brought many changes—economic, familial and sumptuary—which have profoundly altered earlier conditions. It is now possible to contemplate and plan schemes for vocational education in ways not thought of when the Smith-Hughes Act was put into operation. In order briefly to summarize both these changes and some of their possible effects on educational policies, the following compact theses are submitted for critical examination:

1. Nonschool vocational education—apprenticeship, followership and pick-up methods—is highly inefficient in the United States and tends to become less rather than more effective, owing to changing conditions in production. Both apprenticeship and home followership training have always been much less effective here than in some foreign countries.

2. Vocational education through schools is probably as effective in the United States as elsewhere. Vocational schools for the professional vocations are doubtless more effective here than elsewhere. But, measured in terms of needs, America's school vocational training for all the nonprofessional vocations has surely not yet achieved 1 per cent of its potential effectiveness.

3. There are no insurmountable theoretic difficulties in the way of establishing a full competency vocational school for any tangibly standardized or customary vocation. Or, to put it differently, any experienced educator could within a half year organize a full-time, full competency training school for any of the thousand or more distinctive vocations now found in New York City, if given the means to provide equipment and teachers, to negotiate and pay for cooperative facilities for graded participations in commercially productive work, to be freed from all obligations to continue general cultural, civic, hygienic or other nonvocational educations and to select as student personnel entrants of optimum qualifications for the vocation in question.

4. As a means of vocational education, all technical schools offering knowledge but not practice, as for example, all business schools or commercial departments (stenography-typing is an exception), all home economics courses, all

technical high schools, all agricultural high school courses and many college agricultural courses, all extension courses, such as evening, apprentice related, Y. M. C. A., agricultural extension and continuation school, all-day industrial schools which do not lead to journeyman proficiencies, and other part competency offerings are, when their actual achievements in added powers and their proportions of pupils entering work for which the training is directly functional are estimated against money and time costs, inordinately expensive and of doubtful efficiency in a large proportion of cases. At best, they are all weak substitutes, as has long been clearly seen where the professional vocations are concerned.

5. American high schools, being neighborhood service schools, are utterly unsuitable as centers of vocational education, except in the rare instances where such schools assemble 4,000 to 10,000 pupils. A neighborhood containing 1,000 adolescents will commonly provide from one to five workers for each of several hundred vocations.

6. For most vocations any typical well populated American state will require only one school or, at most, a few full-time vocational schools of a size to give optimum combinations of efficiency and economy for hundreds of such vocations as carpentry, house painting, automobile repairing, barbering, hotel cooking, dairy farming, shoe selling, job printing, machine typesetting, poultry growing, dressmaking, photography, truck driving, coal mining, shoe repairing, stationary engine firing or sign painting. Most states now need only a few vocational schools of law, dentistry, nursing, elementary school teaching or engineering.

### *How Many Schools Are Needed?*

Even for such vocations as market gardening, stenography-typing, homemaking and corn farming it is doubtful whether any state needs more than from ten to thirty central schools if these are to be of optimum size. Of course it would be excellent economy for states to pay traveling and boarding expenses of properly mature students in these schools, as the United States does now for West Point and Annapolis, and as Scotland and Australia do for prospective teachers.

7. The widespread popular assumption that the subdivision of labor and the extensive use of machinery have simplified the large majority of vocations involving the production of automobiles, cotton cloth, shoes, wheat, milk, cooked food, mineral oil, books or other mass products, is largely untrue. In most lines of highly mechanized production—locomotive driving, manu-



script typing, newspaper publishing, gasoline manufacture, city school teaching, modern road construction, high-class hotel service, city lot excavation, furniture making, department store selling, telephony, radio manufacture and fruit packing—some service may be adequately rendered by persons of inferior abilities and preparation. But in steadily rising proportions of cases in these and similar fields, demands are growing for more service that combines superior native powers with superior acquired powers of insight, of moral self-control, of sobriety, of self-education, of a sense of responsibility and often of leadership.

### *Shortening the Term of Training*

8. Full-time vocational training and instruction, based on an eight-hour day or forty-hour week, if provided under some well evolved scheme in 1950 for all the sons and daughters of all the people—slightly more than a million of each sex for each year-age—will not prove nearly so expensive as is commonly assumed for the reason that if properly mature, properly motivated, properly selected pupils and properly located schools are available, from six to thirty-six weeks of concentrated training will suffice for the great majority of vocations.

9. Many dynamic social conditions in America, such as increasing wealth, a better diffusion of income, smaller families, increasing proportions of adults between thirty and sixty years of age, curtailed immigration, democratic aspirations of increasing proportions of parents for fuller educational advantages for their children, have been conjoining in recent years greatly to increase proportions of young persons remaining in full-time schools until they are sixteen or eighteen or twenty years of age. And the end is not yet. Presently all the children of all the people under our democratic ideals will want to remain in general schools until they are at least sixteen years of age. Half will remain in general schools until they are eighteen and a fourth will seek colleges.

10. Even now any vocational school would be well advised to make sixteen a minimum age of admission. By 1935, no person should be admitted to a vocational school for a simple or juvenile vocation under seventeen years of age, or to a bona fide trade or other journeyman school under eighteen or twenty years of age.

11. The silly assumption often made that large proportions of boys and girls, and especially those of duller brains, will not desire to continue their general, that is, their cultural, civic, hygienic and developmental educations beyond

fourteen years of age, derives from the fact that, although for hundreds of years schoolmasters have been evolving means of secondary education for the hereditarily gifted of high social station, it was not until yesterday that educators began to seek means, objectives, subjects and methods, of advancing the general educations of the less gifted between the ages of fourteen and eighteen, or even after twelve.

12. Another foolish assumption is to the effect that if at fifteen or sixteen the less able youths are permitted "to leave school," where until recently they have been fed what for them are the husks of seventh grade grammar, formalized histories or nonfunctional arithmetic, or the even more grotesque algebra, French and other first-year high school subjects, and are allowed to "go to work," they will not return to full-time vocational schools. Such an assumption disregards the fact, first, that for persons entering the sub-professional vocations really effective vocational schools have never been available while conditions of apprenticeship have seemed unpromising and, second, that all the pathetic evidence of night school attendance, correspondence school patronage and promotion hunting (seen in labor turnover) points to tremendous demands for vocational preparation between the ages of eighteen and thirty when men especially are seeking earning opportunities adequate to the support of a family.

### *What Motivates the Youthful Wage Earner?*

13. Another unsound assumption often made by educators is that genuine and enduring vocational motivations through some magic originate from within persons, rather than that they are conditioned by social pressures and enlightening processes in the human—that is, the family, the gang, the crowd, the newspaper, the photodrama and courtship—environment.

A Central European boy may at fourteen be well motivated to enter upon the arduous toil and blame taking of a severe apprenticeship. The American youth will not reach that stage until perhaps eighteen, and perhaps not at all.

Why should any open-eyed person expect American girls at fifteen to seventeen years of age to be motivated to learn the vocation of home-making, in view of progressive detachment from maternal influences, progressive gravitation towards premarriage gainful employment and remoteness from actual betrothal?

14. Among the most important of unsolved problems are those growing out of changed promotional conditions in the world of modernized work.



Under simple conditions of economic production the youth commonly begins at the bottom of a ladder of work which gradually leads him to as high a place as his abilities and local conditions will warrant. That condition still prevails in the professions, where there is now no real juvenile stage, and in the few skilled trades that still have apprenticeship conditions. Unfortunately educators are still prone to think in terms of these passing, if not passed conditions.

For in most modernized fields of production the worker no longer ascends his individual ladder. Rather, there are three great plateaus of work, the juvenile or junior, the journeyman or operative and the mastership or leadership, and promotion from one level to another usually involves as much readjustment as if the worker was entering a totally new vocation, which in fact he is.

#### *Two Many Workers Have Juvenile Jobs*

From fifteen or sixteen years of age to eighteen or twenty-one or more, large proportions of American young persons work at employments that are essentially juvenile. The wages may be good for young, untrained and poorly disciplined workers, including of course several million girls, but they are not sufficient for later adult needs, and there is little direct promotion.

From eighteen to twenty-one at the lowest, almost all young American men strive to get out of juvenile work and into operative employments paying enough to permit marriage. Large proportions of young women marry between eighteen and twenty-two and cease to work for wages, if their men can earn enough for the family group. Young women who do not marry have a bad time escaping from juvenile labor levels.

After the age of twenty-five, large proportions of American men strive to reach mastership levels, to become foremen, principals, small proprietors, executives, skilled craftsmen and managers. Even the sons of most farmers pass through these stages. Until he is eighteen or twenty years of age, the youth is a worker on his parental farm. Then for some years he occupies an operative status. Only after twenty-five or thirty does he usually become a managing, capital owning person, that is, a master farmer. Here, however, each stage is in part a preparation for the next.

15. Now the full program of well socialized vocational training of the future will have to plan in large measure for periods of full-time training at the outset of each of these levels.

For most juvenile vocations periods of intensive training of from six to sixteen weeks may

suffice. For most operative vocations periods may well range from six to sixty weeks, since the skilled trades must be included, although it is probable that from twelve to thirty-six weeks full-time training will amply suffice for such vocations as stationary engineer, hotel cook, specialty salesman, homemaker, policeman and hundreds of others where managerial requirements are not severe and where capital owning is not essential. For mastership stages such as those of owning farmer, family rearing homemaker, small merchant, secretary, executive or foreman, periods of training will vary greatly according to conditions.

### Motion Pictures and Education in Sweden

Films of all sorts, from news and scenery to Euclid and the Pythagorean proposition, are now exhibited in school auditoriums throughout Sweden, according to John Ball Osborne, United States Consul General, writing in the *United States Daily*.

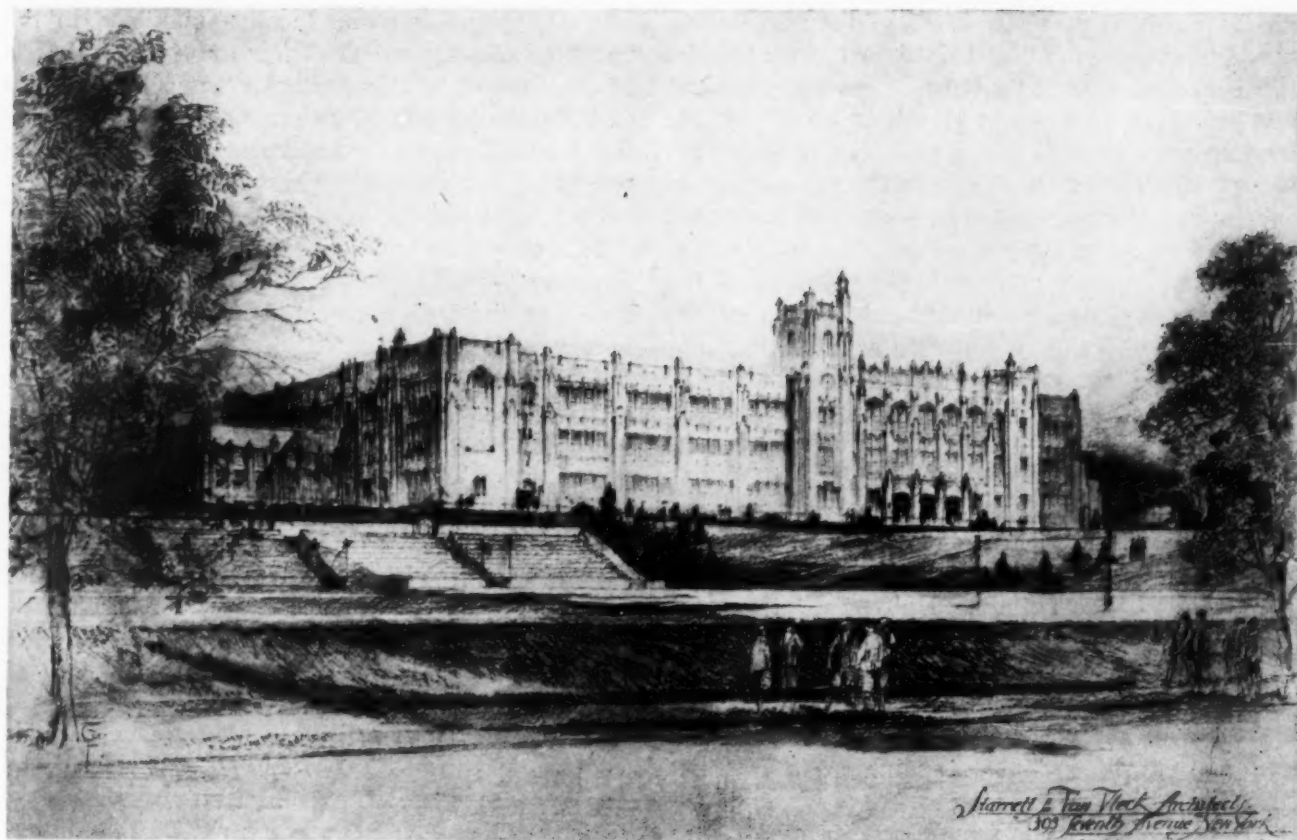
In the larger cities a motion picture theater is rented by all the schools in the community, and films relating to the different subjects are shown. In some rural districts as many as thirty schools are cooperating, thus making these performances possible, because, as a rule, no fee is charged and the expenses are defrayed by school authorities.

All school films are distributed through the largest Swedish film producer in Sweden. At present the company distributes 1,000 school films every week, for distribution in about 1,500 schools throughout Sweden.

About 2,100 school films on the following subjects are carried in stock: geography, zoology, hygienics, botany, astronomy, meteorology, mathematics, chemistry, natural philosophy, physiology, archaeology, history of the fine arts, history of civilization, agriculture, progeny, handicraft, forestry, industry, fishing, hunting, gymnastics and athletics.

About 10 per cent of these films are of American origin. There are also some French, English and German school films registered in the company's catalogue, but most of the school films are produced in the company's own studios in Sweden.

One of the largest hospitals in Sweden, *Serafimerlasarettet*, in Stockholm, has used school films for medical pedagogics for fifteen years. The directors of the hospital are making plans for the building of a film studio in the hospital, enabling the doctors to produce scientific films, illustrating operations and diseases.



## Making Purpose a Part of Design

*The White Plains high school is built in Collegiate-Gothic style, its symmetry giving it an air of individuality without marring its stability*

BY SUSA P. MOORE, CHICAGO

**E**VEN a glimpse of the exterior of the new million and a half dollar high school at White Plains, N. Y., will bring forcibly to mind the strides that have been taken in recent years in the construction of our public schools.

The day has long since passed when only a few subjects were taught in a high school, and when school authorities felt that their connection with the pupils was then finished. To-day, the extra-curricular activities, such as class and social organizations of the pupils, demand space in the building. Present day athletics, both competitive and prescribed, make necessary fully equipped gymnasiums, with the attendant lockers, showers and offices. The school now has its cafeteria where pupils can buy their lunches instead of bringing them and the trudging schoolboy with his lunch pail is but a memory. Administration rooms must grow with the increasing size of high schools. The health department is a new development but a vigorous one. And even the

variety of classrooms is another factor in creating the need for laboratories of many kinds—for chemistry, zoology, cooking, sewing, electrical and mechanical shop work—a problem in school building.

With all these new problems it is no wonder that the planning of a school that will harbor 1,500 pupils, as will the one at White Plains, is something that requires consultations between specialists. When it was decided that a new school should replace the old one of outmoded planning and unsuitable location, the White Plains board of education consulted with Superintendent John W. Lombard and Assistant Superintendent H. Claude Hardy and later called in consultation Prof. George D. Strayer and Prof. N. L. Engelhardt of Teachers College, Columbia University.

Some years ago Professor Strayer and Professor Engelhardt made a detailed survey of the educational needs of White Plains and on this

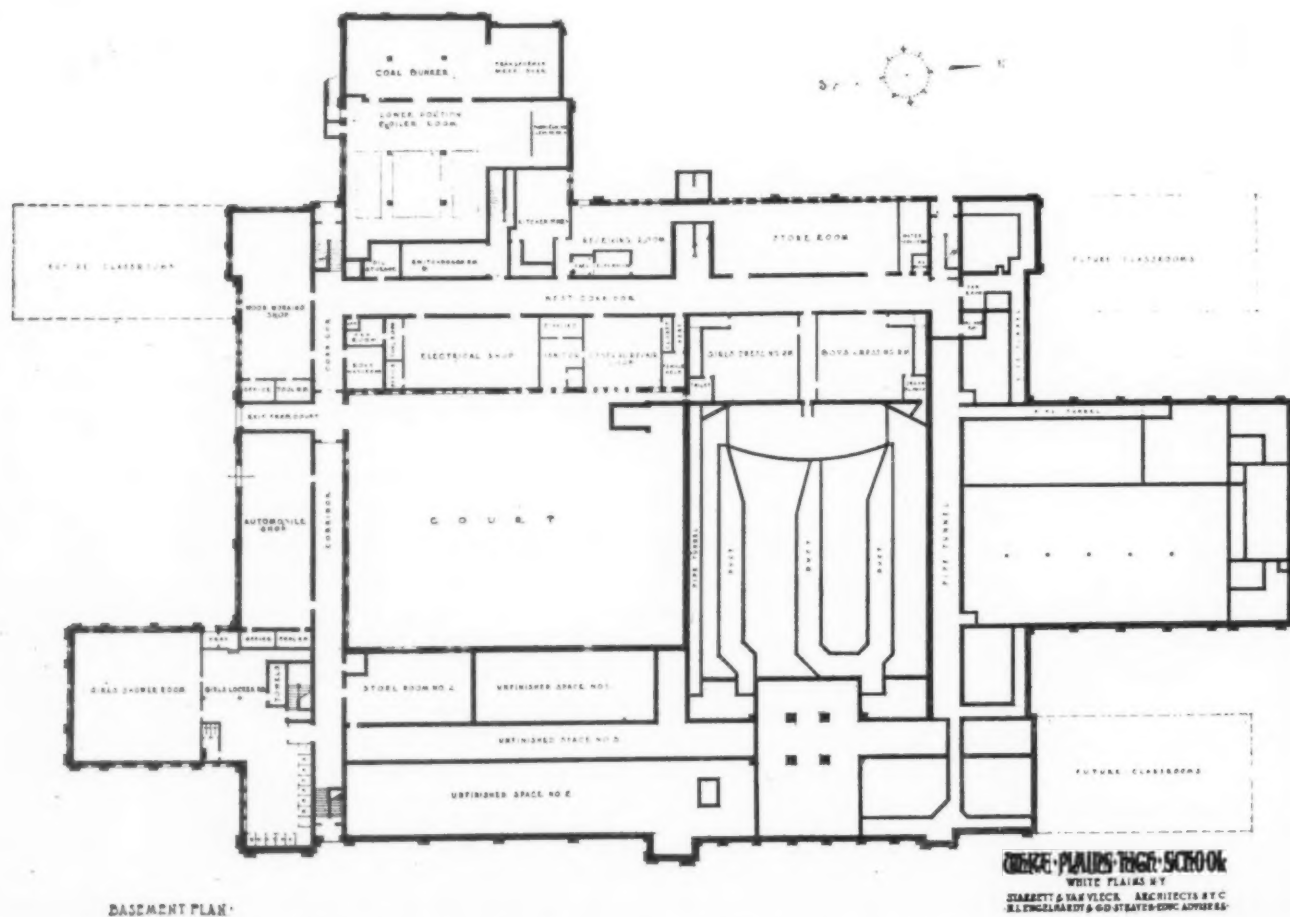
basis they drew up a statement of the high school needs of the city. With this report before them, the board of education, superintendent, advisers and architects designed a plan that would provide economical and suitable space relationships for the various facilities. The placement and size of special classrooms, the arrangement of rooms not used for teaching purposes and of rooms devoted to the maintenance of the physical aspects of the school were gone into thoroughly. One of the points on which all were agreed was the necessity of providing adequately for the comfort of the school staff. Accordingly, offices were planned with special care and retiring rooms were provided for the teachers, and also for the women helpers in the cafeteria and the scrub women.

It was decided to heat the buildings by a two pipe vacuum return system, low pressure type, using water tube boilers. Unit ventilation with gravity exhaust supplies thirty cubic feet of air per minute per pupil and is the standard equipment, chosen because of elasticity of control. Use of fire resistant materials is the main method of fire safeguarding, but a sprinkler is installed above the auditorium stage.

On the basis of this agreement of opinion, pre-

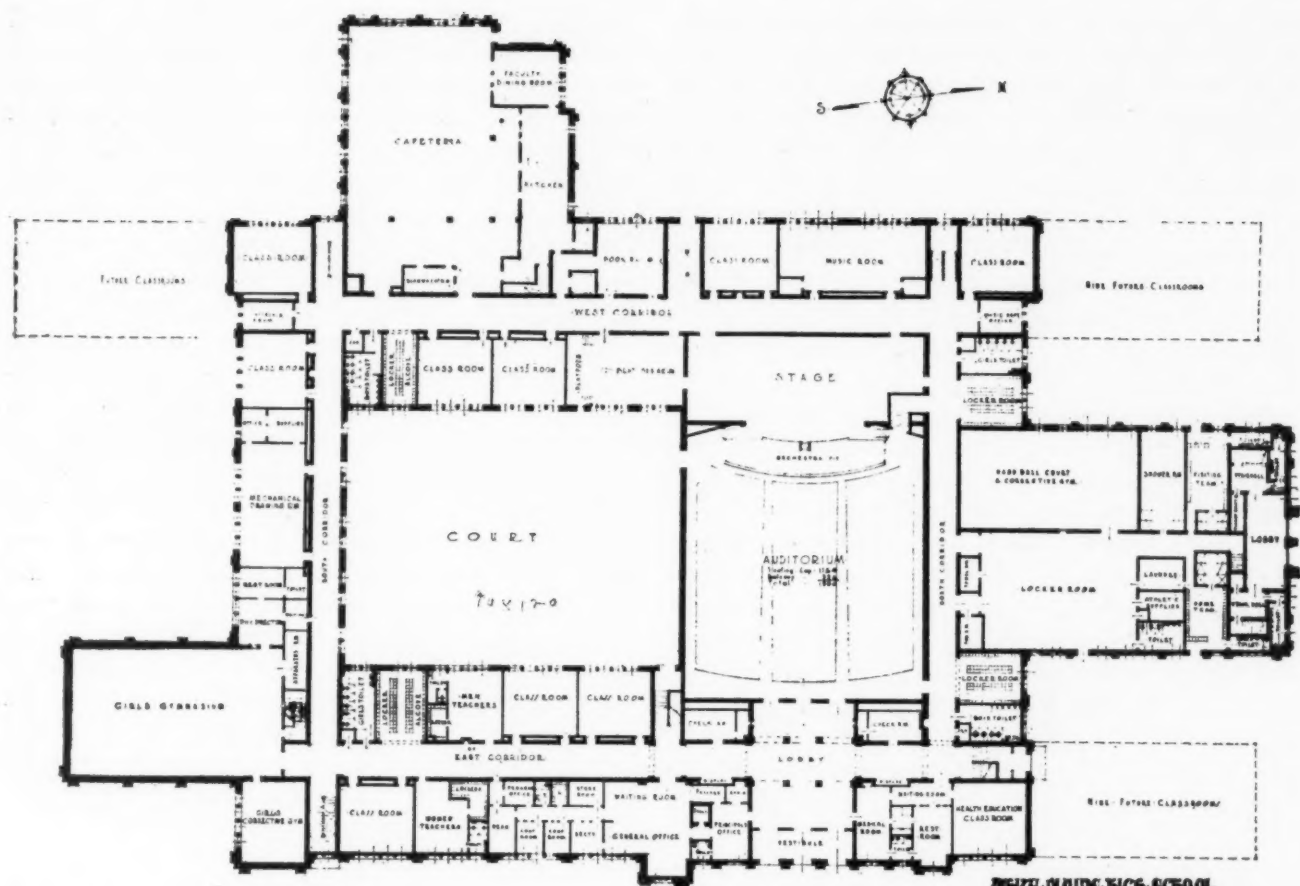
liminary plans were made and submitted to the board of education. On their approval and that of the Common Council, an appropriation of \$1,500,000 was voted by the city for the construction of the building. Accordingly, the architects proceeded with their working drawings, sod was broken, and the building is to-day occupied.

It is only natural that with this amount of preliminary thought devoted to the problem, the exterior of the building should instantly strike the observer with a sense of vitality wedded to stability. The school stands on a plateau at the top of a nineteen acre plot of ground, and from this vantage point its Tudor-Gothic lines appear to advantage. The walls of the building are faced with variegated granite which gives a pleasing effect of shadows, relieved by the trim of limestone. Dominating the face of the building is the main entrance, located in a square tower whose height is emphasized by projected and ornamented corners. Repeating this central note, but in a minor strain, are the entrances at the ends of the building. A skillful use of balanced irregularity is shown in the conception of the dissimilar eaves at either end of the building, and in the use of a parapet at only the north end to balance the



*Classrooms with full daylight, receiving and storerooms are in the basement, as well as rooms for the heating and ventilating plant.*





FIRST FLOOR PLAN

**WHITE PLAINS HIGH SCHOOL**  
 WHITE PLAINS, N.Y.  
 STARRETT & VAN VLECK ARCHITECTS INC.  
 150 LEXINGTON AVENUE, NEW YORK, N.Y.

*Administrative offices are concentrated around the perimeter of this floor, with gymnasiums and cafeteria in the three ells. The spacious auditorium and classrooms take the remainder of the space.*

greater length of the building to the south of the entrance.

The building viewed from an airplane is seen to be built around a large court, 90 by 120 feet in size. At either end and to the back are ells large in themselves, but seemingly small in comparison to the size of the main building. It is planned to make the court a beauty spot for the whole school, landscaping it and planting trees which will give a welcome shade over the walks.

On the ground floor there are classrooms, but only where the rolling contour of the land makes it possible to have windows large enough to give as much light as in any of the upstairs rooms. On this floor are the automobile, the electrical and the woodworking shops, the girls' gymnasium, shower rooms and the service rooms.

A feature possessed by only a few other schools in the country is the advantageous location of the storerooms. All stores are delivered to the receiving room at the back of the building. Adjoining the receiving room are a general store-room and the freight elevator. On the other side of the elevator is the storeroom for kitchen supplies. By careful planning, the elevator has been placed just outside the door of the kitchen on the

second floor, so that a minimum handling of food-stuffs is obtained. The elevator runs to the top floor and is useful for delivering heavy supplies to the laboratories quickly and efficiently. This centralized service of supplies is a point in school design that is generally neglected. According to H. M. Hathaway, of Starrett and Van Vleck, architects, New York City, there are only about thirty schools in the East and South that have it.

Another detail often overlooked in school planning is the provision of a retiring room for the female help. Such a room is here found in the basement.

The maintenance rooms, such as boiler rooms, coal storage, oil storage and fan rooms for the ventilating system, are also in the basement.

The first floor could be designated as the administrative and public floor, for on it are concentrated the rooms that have to do with the school force and the extra-curricular and athletic phases of school life.

As one passes through the imposing entrance, administrative offices are found on one hand, the suite of the health department on the other. Directly in front is the auditorium. Around at the back of the building is the school cafeteria. To

the south is the girls' gymnasium and to the north are the handball court and corrective gymnasium (with locker and shower rooms), each in an ell of its own.

The administrative suite consists of eight rooms, including a large waiting room and general office, the principal's office, a vault, a radio room and a lavatory, an office for the program manager and several other rooms which are used by the dean, for conferences, and by the secretaries. There is a toilet room for the women in this group.

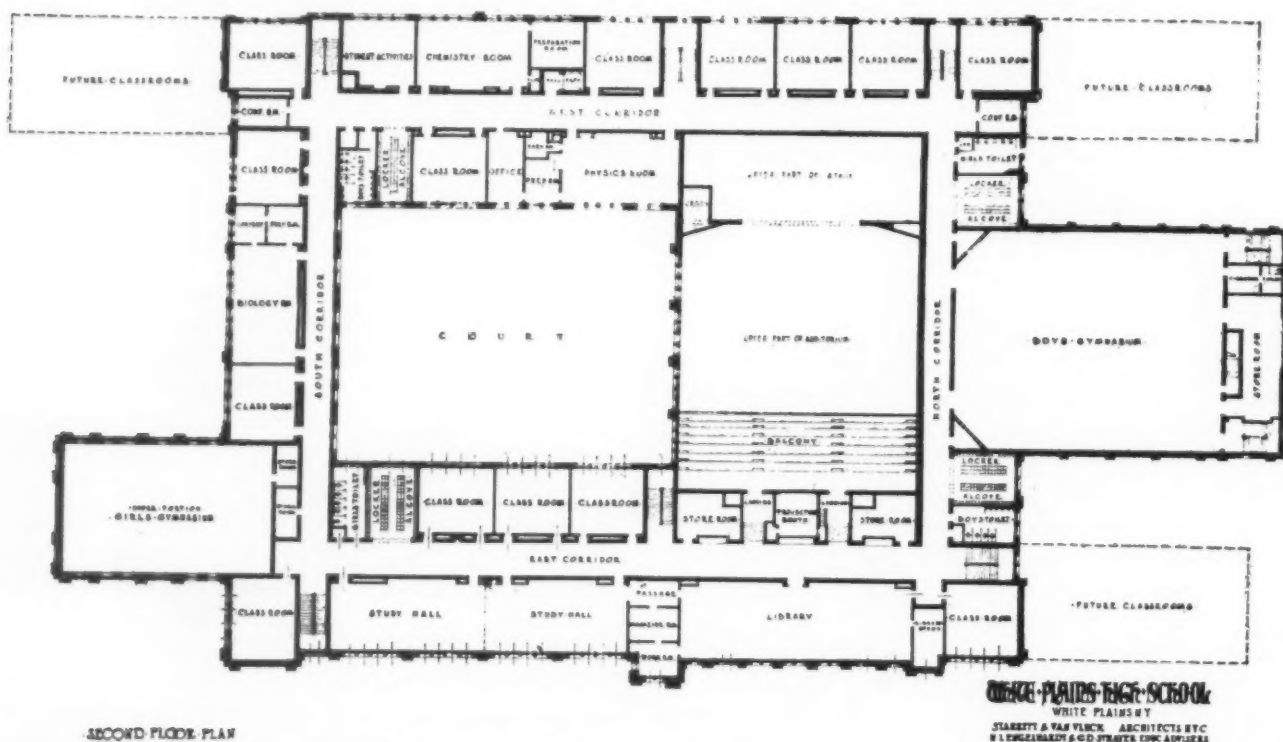
The medical suite is well arranged and includes a waiting room, a rest room and the physician's office. The latter is well equipped and ear and eye tests can be given here when desired.

Directly facing the main doorway and completing the trio of public rooms is the gracious auditorium. Beautifully decorated in such a manner as to emphasize its subtle lines and excellent proportions, it is of esthetic as well as practical importance. Equipment in this auditorium is particularly well handled. The stage is larger than usual, being 30 by 87 feet, and has the regular

theaters. Behind the balcony which is reached from the second floor is the projection booth for moving pictures, stereopticon views and the spot lights. To ensure proper ventilation in the auditorium, there is a central fan with down-draft system and mushroom exhaust.

The cafeteria is becoming one of the most important units of a high school, requiring the services of a trained director. Yet in some ways it is a problem to handle its physical and administrative details efficiently. In this case, the architects located the cafeteria happily. The greater part of it is in a projection to the rear of the main building, but a small proportion is in the major building. Along one side runs the kitchen, with the dining room for the faculty in the corner. Because of the many windows, odors of food tend to be wafted outdoors, but to make sure that none would escape inward, two unit ventilators were installed. These unit ventilators introduce air in ample amounts to maintain a positive pressure at all times. The air is acceptably fresh and free from odors.

Although the cafeteria is not large it is amply



*The library and study halls are the real center of this floor. Laboratories, classrooms and the main floor of the boys' gymnasium are also on this level.*

theatrical overhead gridiron. In the basement below the stage are two dressing rooms which are almost elaborate. The one for the girls has some decidedly professional gadgets, including a make-up shelf similar to the one at Roxy's. The orchestra enters the pit from below by direct entrance. Lighting is similar to that in professional

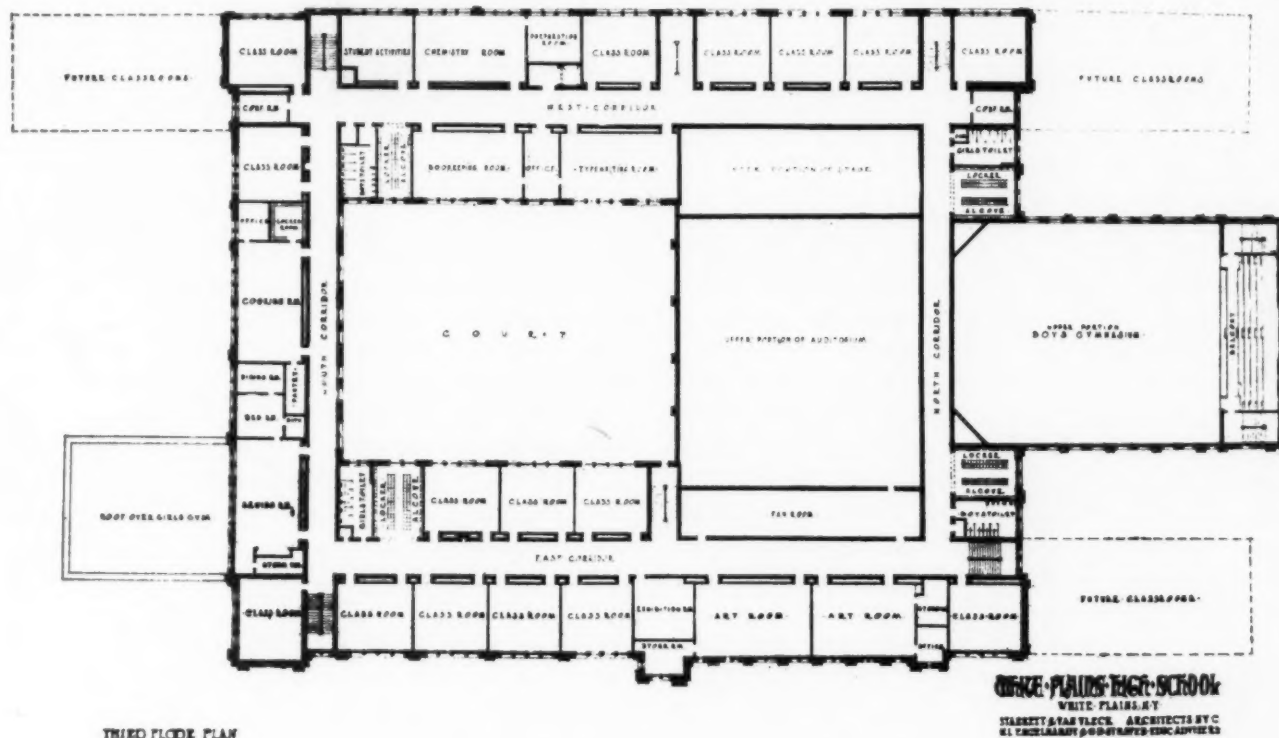
sufficient to serve the pupils by having them arrive in three shifts of 500 each.

Since the boys' gymnasium is on the second floor, the locker rooms, shower rooms and team rooms, as well as the handball court and corrective gym room mentioned before, are in the first floor space under the gymnasium proper.

In addition to the usual lockers and dressing rooms for the men and the women members of the faculty, the architects have planned rest rooms where they can relax.

Avoidance of congestion is one of the cardinal points in the planning of this building. Witness

On this same floor is the boys' gymnasium, with its floor of 50 by 94 feet. An unusual feature here is its collapsible bleachers which fold back against the wall and leave the floor entirely clear for class work. This arrangement is used at Albany, N. Y., also. The room has been planned



THIRD FLOOR PLAN

*Classrooms of standard size, 23 by 26 feet, and the home economics demonstration suite are on the third floor.*

the grouping of the administrative and public rooms around the front entrance. Another example is the number of outside exits and the abundance of stairways. In addition to avoiding crowding, this cuts down the fire hazard materially. Near the four corners of the building, and on every floor are locker rooms for wraps and toilets. Two are for girls and two for boys. The intention in this scattering is that every child will be able to leave his wraps in the locker nearest his home classroom.

Music, mechanical drawing and public speaking classrooms as well as standard ones are on this floor.

The girls' gymnasium and corrective gym room as well as the office of the physical director are in the south ell.

The second floor is dominated by the library and study rooms which cover almost the entire front part of the building. An office for the librarian, a workroom and the periodical room complete the suite. It is to be noted that the study hall is a long, narrow room, which ensures plenty of light for those along the inner wall, and that the several entrances to the hall obviate the necessity of much walking within the room.

in such a way that the entrances and exits provide for rapid clearance of the room when desired. As is desirable in such a room, special ventilation is provided in the form of two unit ventilators which are used either for the addition of fresh air or for recirculation of air. Although the gymnasium can be entered from the school building, it has an outside entrance and double stairways leading up to the main floor of the gymnasium and to the balcony.

On the remainder of this floor and on the third floor are the classrooms and laboratories.

The home economics work is of a practical nature and makes use of a suite of rooms including a dining room, bedroom and bath for demonstration purposes. The modernly equipped cooking laboratory and sewing room are well lighted.

New problems of school administration and the greater social importance of the high school in the community have combined with advances in heating, ventilating and fireproofing to make erection of the modern school a problem to be solved not by one group, but by a conference of specialists. This is the modern method of approach. The best recent examples of efficient school planning have been developed on this basis.



# An Adequate Placement Bureau and How It Should Function

*A carefully worked out plan for placing pupils in the kinds of employment for which they are best suited is here presented together with practical suggestions*

BY PHILIP LOVEJOY, ASSISTANT SUPERINTENDENT OF SCHOOLS, HAMTRAMCK, MICH.

THE question of the placement of the product of the public schools is ever before administrators. Some sort of policy must be established and some sort of technique must be inaugurated to assist in solving this problem.

Because of the numerous questions that arise in this division of the school administrator's work it has been thought well to set forth some plans for such a service. Let us assume a city, call it Worktown and analyze its problem. The first thing is to make a statement of the problem. The administrator studies his local situation carefully and then prepares the statement.

Economic pressure in an industrial area such as Worktown is so severe that frequently many children of school age are compelled to secure employment. It is the policy of the Worktown Board of Education to provide if possible adequate service, of whatever nature, to enable its citizens to live successfully in a democracy. Furthermore, the Worktown Board of Education has stated that all essential supplies, equipment and personal service shall be provided free for all Worktown citizens who desire, in accordance

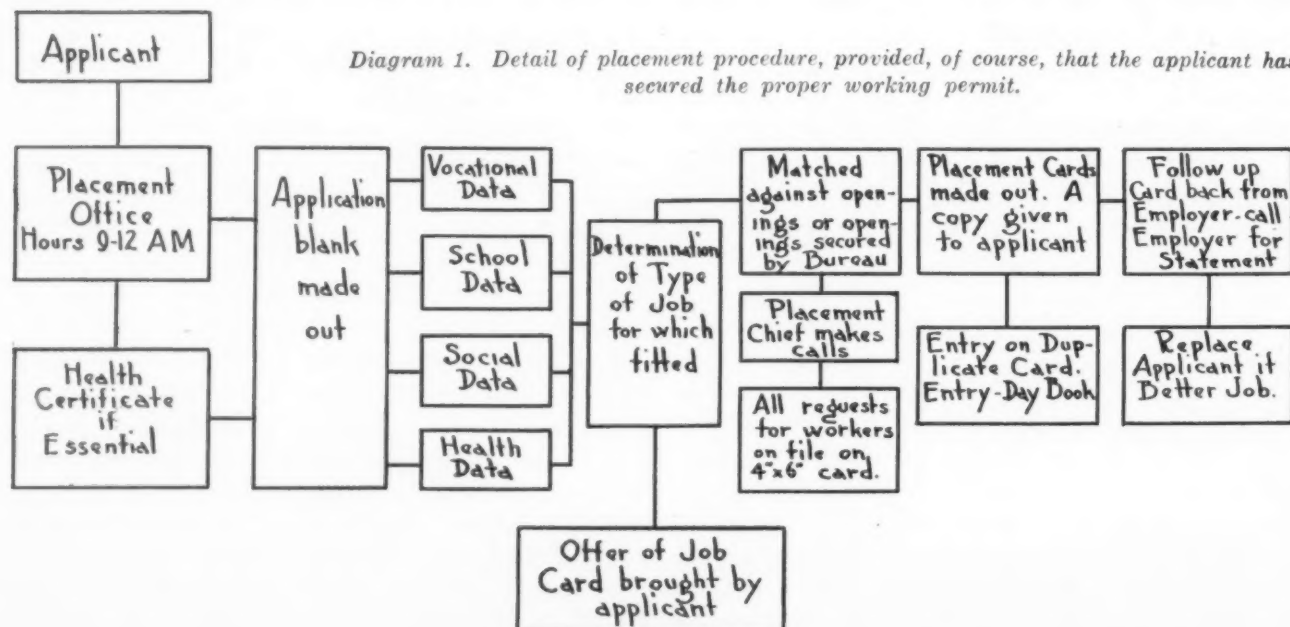
with state laws, to avail themselves of the various offices of the public schools.

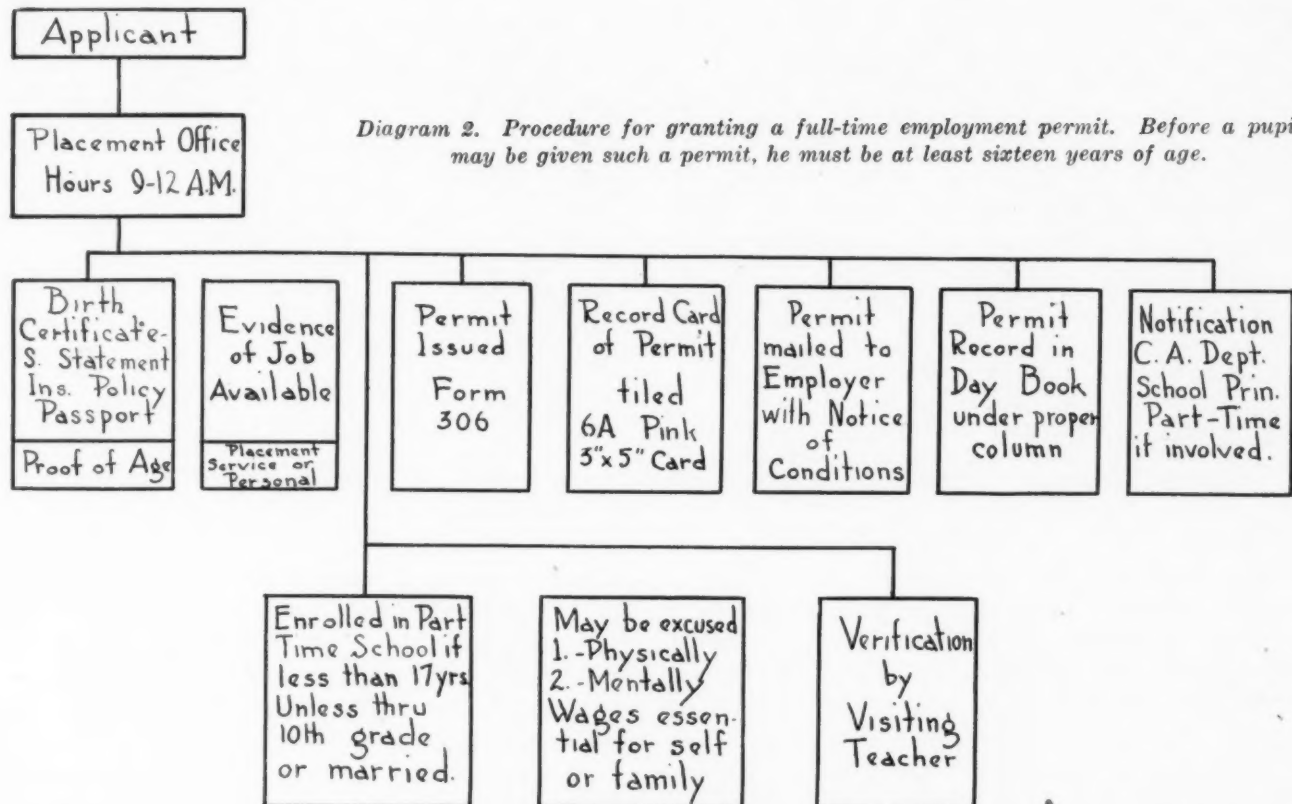
Not only must an adequate organization for instructional purposes be furnished but there must be also a procedure for seeing that Worktown children, when trained in accordance with their abilities, are properly placed in the economic order. This involves a complete system of vocational guidance and placement.

The aim of this article is to set forth the plan of such an organization.

This plan must include the type of personal service, the location of the bureau and its equipment, and the special forms that will be needed. Hours of service and other incidental matters must also be considered.

It is not properly within the scope of this article to set up the procedure for vocational guidance. We shall assume that such guidance is obtained in accordance with the policies previously adopted by the Worktown Board of Education and shall endeavor to ascertain the exact social conditions of the citizens of Worktown in order to understand more fully the type of place-





ment work that must be rendered, whether to pupils who leave school early or to graduates of the various curricula.

It is to be noted that this social information would naturally become the essential background for the program of vocational guidance.

Furthermore, it is to be assumed for the purposes of this article and for the bureau that this article advocates that the results obtained in the vocational guidance department are available for use in the placement division and the plan as herein advocated will be based on this hypothesis.

The administrator in preparing his plan for the board will include a statement concerning the cost.

Since it is the policy of the Worktown Board of Education to supply necessary agents to carry out essential programs, this problem may not correctly concern itself with the cost of the system as advocated except to build up that which is absolutely essential to satisfy existing needs.

No administrator can proceed far in developing techniques until the board of education for which he is the executive has formulated and adopted certain definite policies.

The administrator must now plan his procedure. He decides that he will need certain data, so he prepares an outline of the information he wishes to obtain:

Facts about the city: location, size, historical background, government, industry, tax rates, school and city, probable expansion of city.

Facts about the people: How many? What ages? What races? Marital status? Stability, what they do, number of children, racial traits, language used in home, citizenship status, number of schools, home ownership, aims, aspirations.

Facts about the industries: How many? What type? How many employees? How are employees secured? What training is required of prospective employees?

Facts about present system of placement: What demands have been made by employees, by applicants? How successful has the bureau been—where has it failed? What is the cost of the present bureau? What are the needs of the people? What are the legitimate demands that may be made upon the bureau? What personal service is needed? What must the activities be? What printed forms are essential? What office hours? What contact work? What system of follow-up? When does the service feel that a case is legitimately closed? What graphic plan of organization can be drawn?

Definite recommendations and approvals should be made by the board of education.

The administrator must next proceed to gather the data he has listed in his outline.

All the data with reference to the city are ascertained and presented to the executives in typewritten form.

The tables as finally presented will consist of the following items: map of the city; history of the community; character of the city; govern-

TABLE I—TIME ANALYSIS WORKTOWN PUBLIC SCHOOLS PLACEMENT BUREAU  
Week of November 5-10

Activity	Mon- day	Tues- day	Wednes- day	Thurs- day	Fri- day	Satur- day	Total
Conference with applicants.....	75	35	35	65	60	15	285
Make out cards.....	20	20	20	35	40	10	145
Office work, not placement.....	65	..	..	10	..	..	75
Issue working permits.....	40	35	25	75	25	5	205
Call factories for jobs.....	25	55	..	95	45	25	245
Mailing permits .....	45	20	..	15	10	..	90
Conference with parents .....	10	..	15	15	10	..	50
Conference on staff.....	25	55	30	40	80	25	255
Checking for birth date.....	15	..	..	..	..	..	15
Attendance problems .....	10	..	..	..	..	..	10
Filing cards .....	70	190	280	50	120	100	810

ment; airplane picture of the city; financial tables, including rates and valuations and non-resident property; a balance sheet of school finances; several graphs in tax rates and school costs; age distribution of men based on a study of last census; age distribution of women based on a study of last census; nationality distribution; marital status and residence in Worktown; number of children born in each family; family distribution based on language spoken in home; citizenship status of men (foreign language home); citizenship status of women (foreign language home); citizenship status of men (English speaking home); citizenship status of women (English speaking home); home ownership; five-year enrollment figures of local public schools.

The summary of what is presented might include the following facts:

1. The obvious conclusion to be reached from the careful analysis of the financial condition of the Worktown school district is that the city is in excellent financial condition and can easily bear the burden of financing school plant needs as outlined earlier in this study. Under the educational policies adopted by the board of education and now in force in the public schools the school program can be operated efficiently, both educationally and financially.

2. The city is small and yet there is a large metropolitan area from which requests for employees may be secured.

3. The city is predominantly industrial.

4. The tax situation is entirely favorable to the schools. Industry pays a large portion of the school expense.

5. The families are large and hence the employment problem is aggravated.

6. Because of the attitude of the board of education in desiring to render service to all

classes of people, it is safe to assume from these tables that the schools are wise in establishing a placement service that shall serve the entire community. (Notice that we use the word "service." This differs greatly from the ordinary employment bureau in so many schools.)

7. The foreign language difficulty must be met by the placement service. Foreign language clerks must be employed.

8. The population being predominantly young means that families will continue to be large for some time to come. This will further aggravate the employment problem.

9. The high percentage of home ownership by the population means that the group is endeavoring to solidify and establish itself.

10. It will be noted that the members of the group are rapidly endeavoring to become citizens so that all the service that can be rendered at this time will be of much greater help in assisting the population to stabilize itself.

A careful study of the industries should then follow.

After several pages of statistics offered on the entire industrial situation there might be a brief summary which would read as follows:

#### *Facts About the Industries*

The foregoing paragraphs have set forth the number of major industries of the city of Worktown. There are, besides these, a number of industries in the adjacent metropolitan area that are served by the Worktown labor market. In the confines of Worktown itself there are more than 25,000 workers employed. These comprise all types and kind of labor. They vary from the lowest unskilled class to that of the highest proficiency. Youngsters having to quit school for economic reasons can be fitted along the voca-



tional ladder at the point where their abilities best fit them. This is also true for pupils who have graduated from the commercial or vocational courses.

Employees are secured by the employment departments of the industries affected, and the best way to secure contracts with these departments is to have a personal representative visit the head of the employment division and make known the facilities of the public schools. When a personal contact is made there is a fraternity that savors of proficiency and hence the industry may be assured that competent workers will be sent in response to requests.

The next step in the outline as originally prepared by the executive concerns the present employment bureau situation. This should be a careful and impartial survey with a view to ascertaining the facts concerning the real situation.

*Facts About the System of Placement  
Prior to 1929*

As has been intimated, there was not sufficient personal contact between the bureau and the industries. This was due to the fact that the bureau was lacking in the type of personnel that was needed to do this particular work. When a time sheet was taken of the clerical force that was being used, it was discovered that it was overmanned with clerical labor of a type that was not demanded by the bureau. This meant a readjustment of personnel.

The time analysis referred to was taken in the week of November 5 to 10, 1928, and it is shown in Table I. A study of the sheet shows that far too much time was being used in filing and that conferences with applicants were being held with the clerk in the office instead of with the expert counselor. Far too much of the clerk's time was being used in making out cards. Calling factories for jobs occupied nearly six hours of the girl's time. As has been stated, if proper contacts were made, the jobs would be called in and less time taken by the office force in hunting up the jobs. Conferences on the staff occupied nearly six hours of time and this was wasteful.

The summary of the time analysis showed that the bureau was functioning uneconomically and that a complete revision was necessary.

The next item studied was that of printed forms. Those in use were entirely inadequate to a modern placement service.

A business card was being used to serve as an introduction to employment bureaus whether or not they called up the school bureau. In other words, if an applicant came in for a job and there was none, he was given a school business

card with the words on the back: "Introducing \_\_\_\_\_." This often happened when a boy came in and stated that he wanted a card to a large manufacturing plant or factory. In other words, it was not a service bureau, but an obnoxious practice, since it tended to get the boy ahead of the line whether he was qualified or not.

The application for work blank was entirely too small and it did not give the information needed. The placement record was entirely inadequate in that it did not give the necessary information. Results were not stated. When a

TABLE II—ACCOMPLISHMENTS OF BUREAU  
FROM SEPTEMBER 20 TO DECEMBER 8

	Permits	Applica- tions for Work	Re- quests	Placed
Sept. 20—Boys	6	5	5	5
Girls	3	2	1	10
Sept. 29—	9	2	1	9
	19	7	4	24
Oct. 6—	4	5	6	6
	9	3	6	13
Oct. 13—	15	4	2	6
	8	1	5	5
Oct. 20—	14	2	5	7
	5	5	6	2
Oct. 27—	11	2	1	5
	10	3	6	17
Nov. 2—	13	3	2	6
	4	3	5	4
Nov. 10—	6	7	1	8
	10	4	6	9
Nov. 17—	4	2	2	6
	11	7	2	10
Nov. 24—	12	5	2	10
	4	3	3	8
Dec. 1—	2	1	5	10
	4	4	3	5
Dec. 8—	5	4	3	17
	7	3	1	8
Totals—Sept. 17 to Dec. 8				
Boys	101	42	35	95
Girls	94	45	48	115
	195	87	83	210

permit was issued there was no adequate means of keeping a record of that permit. A complicated form had been devised which was expensive and inadequate.

Over \$600 worth of files were being maintained to keep the information. The method of filing was too complicated, taking too much of the clerk's time and not giving the information needed in the simplest form.

There was no proper introduction card to em-

ployers. There was no proper method of keeping a record of the permits and jobs in a day book. The state employment permits, of course, were in use. A continuation school permit was in vogue.

The conclusion concerning these forms, therefore, was that those then in use were entirely inadequate to the needs of the bureau, save for the regular working permits. Complete new forms had to be devised.

An analysis of the functioning of the bureau was kept from September 20 to December 8, 1928. This analysis is illustrated by Table II. It will be noticed that the chief work of the bureau was

the bureau's use for the fiscal year cost \$264.61.

An adequate system of printed forms needed to be devised. These were made up and submitted for approval and adopted.

The time analysis showed that too much clerical time was being allotted to the bureau. It also showed that there was not enough executive time. Hence, the clerical time was cut to three hours per day, from nine to twelve o'clock in the morning. An evening period was necessary owing to the fact that some of the applicants could not come in during the day.

A part-time executive was placed in charge of the bureau. He has complete charge of all child

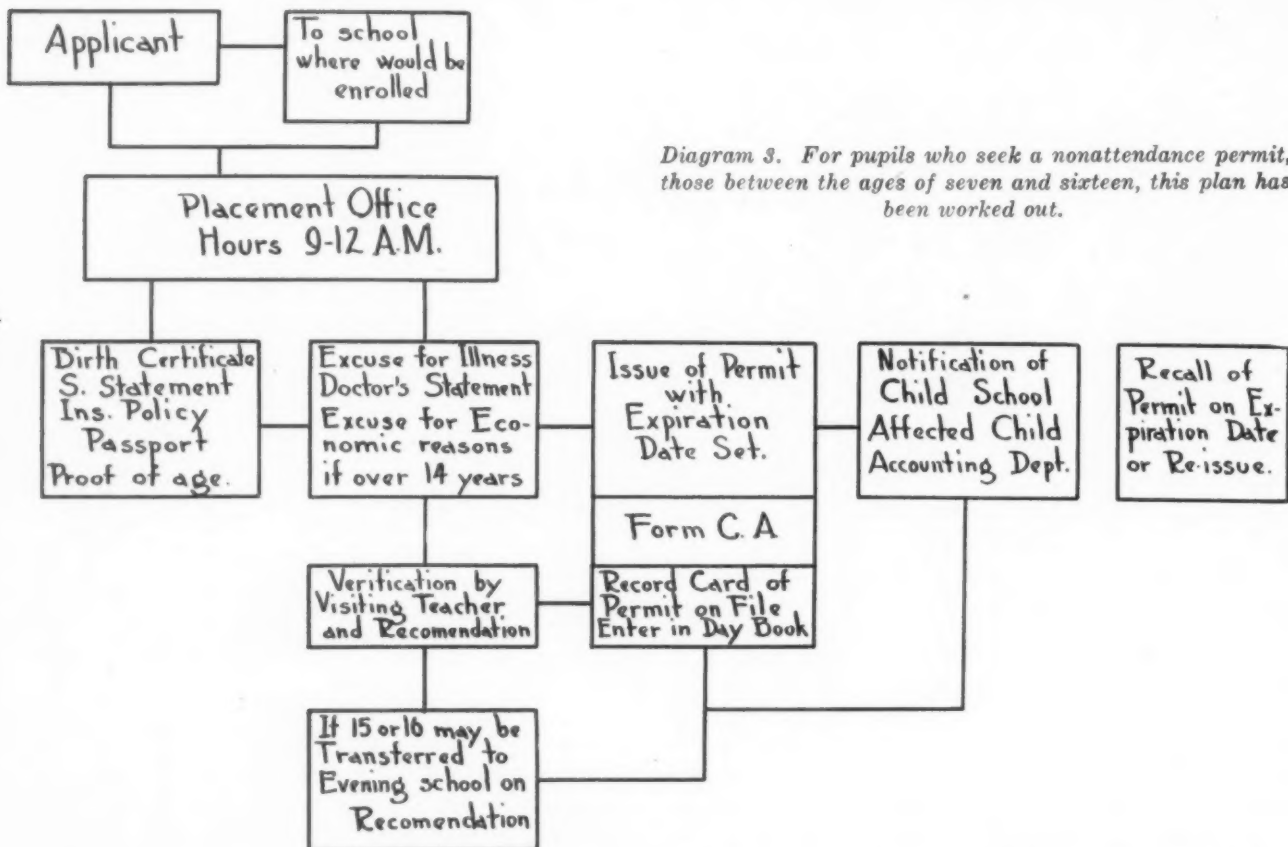


Diagram 3. For pupils who seek a nonattendance permit, those between the ages of seven and sixteen, this plan has been worked out.

the issuance of working permits. During that period, there had been eighty-seven applicants for work and eighty-two requests for workers; but 210 jobs had been given out. This merely shows that the bureau records were not adequate.

The failure of the bureau was due to the fact that no proper analysis was being made of the individuals who applied for work, nor was there sufficient information being obtained as to the type of worker desired. Hence, an adequate service was not being rendered.

The cost of the former bureau was taken up by the full-time services of a clerk at \$80 a month and the part-time supervision of the assistant superintendent of schools. The personnel element would not total over \$10,000. Supplies for

accounting activities. Placement was made a part of his duties. This made possible opportunity for conferences by an executive who has time and knowledge and it also made possible time for contact with industry and follow-up. The cost of the bureau was then as follows:

One-half time clerk.....	\$ 400
Night work .....	60
Executive (half-time).....	1,500
Supplies .....	300

Total .....\$2,260

The compactness of the community demanded a single central bureau. Were Worktown larger there would still be a central bureau with outlying schools making use of it. This means that the

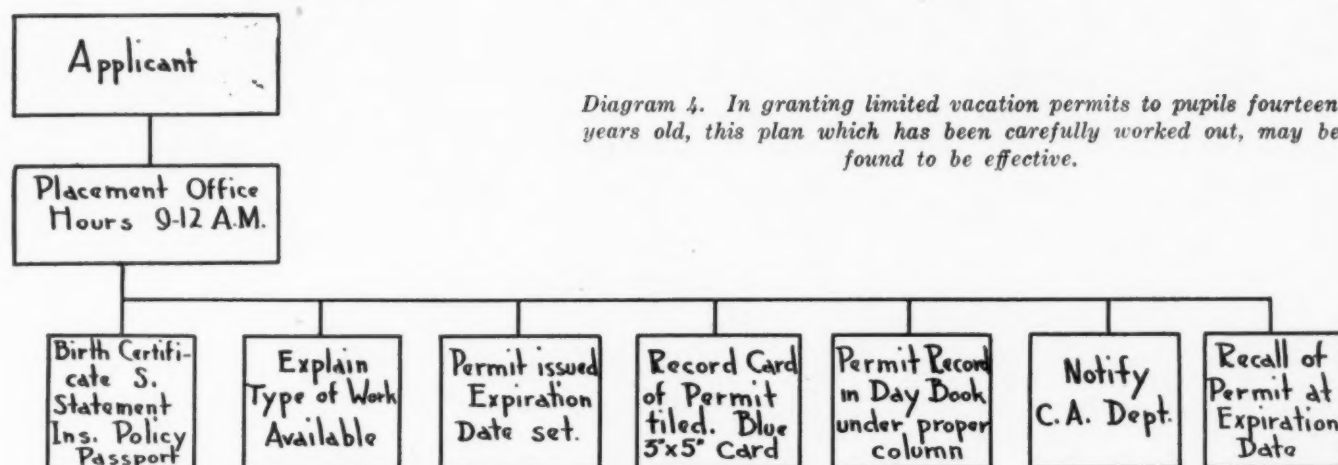


Diagram 4. In granting limited vacation permits to pupils fourteen years old, this plan which has been carefully worked out, may be found to be effective.

new arrangement will be increased accordingly. (The total costs of service have not been increased to the board of education because of a rearrangement of the child accounting department.)

The placement bureau needs to act as a sorting office where applicants for work are matched against calls for work. In the past, this has not been done and hence no service has been rendered. Even though a girl applies for a position with a specified company, she should not be given that position, providing it is open, unless her qualifications are such as to make her more successful here than in any other position. This means that the placement bureau must have on file: the vocational guidance information; the scholastic record; the health record; the social record.

A proper study of these records will tend to show where the pupil should be placed. This will give service to the girl, to the industry, and to society at large.

Even after an individual is placed, there should

be a follow-up. Is satisfaction being given? Is satisfaction from the industry to the pupil being rendered? Is the transaction mutually profitable?

A case is not legitimately closed until every applicant has been placed in a position in which he may develop to his greatest capacity and in which industry is served to the fullest extent. Greater care needs to be taken in the original placing, but a careful system of follow-up needs to be maintained.

A graphic plan of organization needs to be printed and placed in the hands of all executives in the system that they may be better informed as to the proper functioning of such a bureau. Diagrams 1, 2, 3 and 4 are samples of such a plan.

A new system of filing needs to be devised that will take less time and yet be more efficient. This system of filing will involve three files which have space for documents in the three lower drawers. There will be combination 4 by 6 feet and 3 by 5 feet drawers in the upper space. Thus these files

Diagram 5. Files needed in the placement department. The system illustrated here is efficient and prevents any unnecessary waste of time.

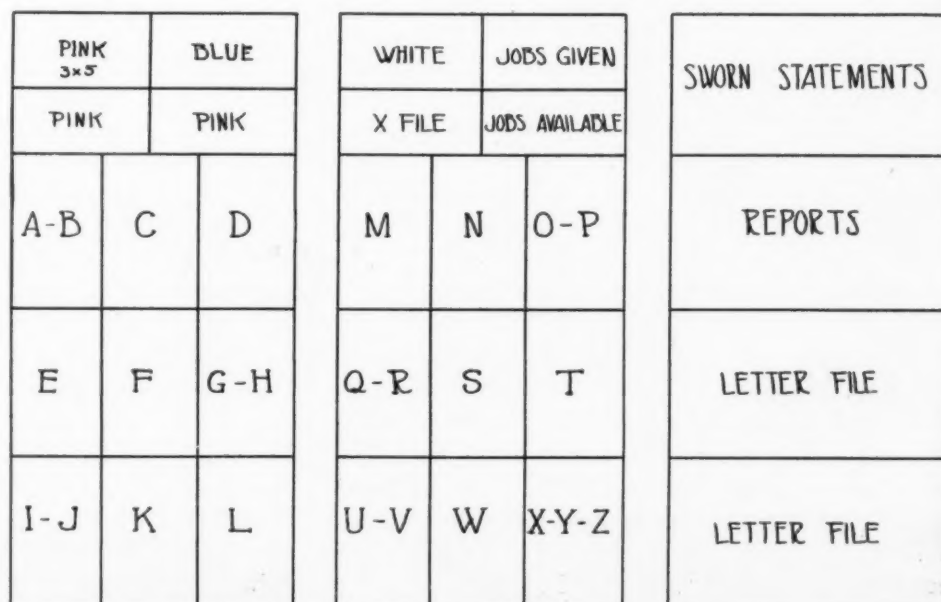




TABLE III—STATEMENT OF THE SUCCESS OF THE BUREAU SINCE ITS REORGANIZATION

	<i>Calls for Help</i>	<i>Applications for Work</i>	<i>Number Placed</i>	<i>Not Placed</i>	<i>Not Filled</i>
Boys .....	38	38	29	9	1
Typists .....	2	..	2	..	..
Factory .....	18	..	14	..	..
Messengers .....	7	..	3	..	..
Clerks .....	9	..	7	..	..
Stock .....	2	..	3	..	..
Girls .....	52	36	46	10	6
Office .....	9	..	9	..	..
Housework .....	11	..	7	..	4
Factories .....	19	..	18	..	..
Sales .....	13	..	12	..	1

can be made to hold all the permit data. A regular letter size correspondence file should also be maintained. These three files can be secured for approximately \$155 and thereby the cost of filing will be cut from \$600 by nearly \$450.

Inasmuch as the files formerly used by the employment bureau are needed to augment the cost analysis of the finance department the switch is mutually profitable. Diagram 5 is an illustration of the files to be used.

There must be a study of turnover in jobs placed. No such study is now available. There must also be a study of money earned by the persons placed by the bureau. Table III gives figures on the success of the bureau from January 1 to May 1, 1929.

It will be noticed that the bureau is functioning much better now than formerly. Still the greater amount of work of the department is to issue placement permits. As the new man takes hold, however, more contacts will be made.

The reasons for not placing some of the pupils are interesting:

One boy had a bad record and many places would not employ him; one boy too particular about the jobs offered; several boys waiting for better jobs; six girls waiting for vacation jobs applied early; two were too particular about types of jobs; two colored girls were not placed.

The final recommendations are: more and more time allotted to contact work and to a study of the vocational aptitudes of applicants; a closer sifting of the applicants against the work offered as well as a more adequate follow-up and more adequate reports of the work done; employment of a foreign languages clerk to eliminate language difficulties; applicants made to feel at home and the procedure allied with social service.

Other recommendations are: morning and evening office hours; more adequate forms; a better system of filing; unpadded reports and diagrams that show exactly the procedure necessary to get a work permit.

Forms that are helpful in placement work are as follows: (1) application blank; (2) permit—16 year old (permanent); (3) permit—vacation; (4) permit—nonattendance; (5) records card for permit, three forms, issued in three colors; (6) notice that a permit has been given, and that a permit will be mailed; (7) introduction to employer; (8) cross file card for types of jobs to be found in local factories; (9) statement that applicant will be hired; (10) a daily report sheet of what is accomplished (federal government); (11) card that the pupil must report on to the placement bureau; (12) a follow-up report; (13) letter heads; (14) business cards.

## Boston Now Has a Superintendent of Construction

A superintendent of construction is to have complete charge of the construction and repair of school buildings in Boston, according to legislation recently passed. He is to receive a compensation of \$12,000 a year. He will be appointed and directed by an unpaid commission of three—one appointed by the mayor, one by the school committee and a third appointed by these two. All reports of appropriations must be approved by the superintendent of construction, by the board of three commissioners and finally by the school committee. All plans for school buildings are now to be approved by the superintendent of schools of Boston.

# The Talking Picture Moves to New Fields of Conquest

*With few exceptions, every course that is taught in the schools may be enriched and made more effective by the use of the talking picture*

By HARRY D. KITSON, PROFESSOR OF EDUCATION, TEACHERS COLLEGE, COLUMBIA UNIVERSITY

THE talking picture which has captured the attention of the public has been regarded chiefly as a form of entertainment, and as such has effected profound changes in the realm of musical and dramatic entertainment. But signs are evident that it will soon make other conquests. One of the fields that is about to feel its imprint is education, where it will probably induce changes just as radical as those in the domain of entertainment.

The first intimation of these developments came last summer when a demonstration talking picture was shown in a number of universities.<sup>1</sup> This film opened new vistas to the imagination and revealed new ways of accomplishing the eternal purposes of education.

At present we can only hint at the contributions the talking picture can make in the teaching of the various school subjects. In the social studies, for example, contemporary history can be graphically presented through the figures and words of living statesmen, such as the President of the United States taking the oath of office.

It is easy to imagine the day when courses in geography will be enriched by talking pictures

made by well known explorers. How inspiring it would be to listen to a course on the geography of the Antarctic given by Admiral Byrd. Even now, announcement has been made that a number of motion pictures which have been made by Roy Chapman Andrews, William Beebe, Mr. and Mrs. Martin Johnson and other explorers are being synchronized by running lectures delivered by the explorers themselves.

In science, it is easy to see how demonstrations of standard scientific experiments can be made by prominent physicists, chemists and psychologists, and distributed among educational institutions so that even the most remote class may sit at the feet of the masters. The tremendous interest roused by the film made by Einstein indicates the wider service that scientific films can render in schools.

The teaching of foreign languages is another field in which excellent use may be made of talking pictures. A teacher of French who witnessed the demonstration talking picture exclaimed: "That's exactly what we need. In the talking picture the student can hear not only the correct pronunciation but he can also see the formation of the lips. It will save an immense amount of time, since we are obliged to repeat the same words and

<sup>1</sup>Kitson, Harry D., Teaching by Talkies, The NATION'S SCHOOLS, October, 1929, p. 45.



Sixth grade public school pupils at Bronxville, N. Y., as they appear in the talking picture "A Case for Professional Study."







Activity period in a first grade class at Bronxville, N. Y. A wide range of interests is shown in this talking film.

make ready use of demonstration films explaining the operations involved in cooking a meal, trimming hats and the like. To illustrate the utility of a talking picture in a trade school let us take a unit of the course in automobile repairing—how to install the lighting system of an automobile. This would involve a picture in which a master electrician performs each step and explains it as he goes. The picture would be used as an introductory lesson in order to give the pupils a grasp of the job in its entirety.

An objector might inquire, "Could not the teacher do this as well as the talking picture?" He probably could with a small class, but with a large class—more than a dozen—the boys could not see and hear his exposition. The talking picture, carefully posed and shot from several angles, could concentrate attention on exactly the point under consideration and enlarge it so that a large class—as many as a hundred—could see and hear perfectly.

#### *An Invaluable Aid in the Vocational Field*

Another advantage of the talking picture in trade training, which inheres in no other instructional medium, is that it can exhibit an occupation as a whole and help the pupil see a detailed process in relation to the entire occupation.

It may have appeared from the preceding dis-

cussion that we are advocating the talking picture merely as a vehicle through which to impart information. This is, however, too narrow a view. It may be inspirational as well, widening the intellectual horizon, deepening the emotional life and motivating the will. One of the best examples of this may be drawn from the field of vocational guidance. Here the talking picture cannot possibly impart minute information about the ten thousand or more occupations. But it can present, in dramatic form, the principles one should employ in planning a career. It can tell the life story of persons who have succeeded and can illustrate the steps by which they attained their success. In planning such dramatizations we should observe one precaution. For purposes of vocational guidance we should not present merely the processes involved in an occupation. We do not want the story of shoemaking, for example, "from raw material to finished product." The information should come in the form of the life story of a worker in the occupation, showing how he began at a simple job and worked his way up the ladder. It might well be entitled, "From Messenger Boy to General Manager."

In certain vocational subjects the talking picture can give tests fully as effectively as can the classroom teacher. For example, a speed test in shorthand can be given to a hundred pupils in the

same time that three teachers could give it to their separate classes.

Interest in the talking picture is not limited to a single group of educators. It permeates the educational world—kindergarten, elementary school, secondary school, trade school, college and professional school. It challenges equally the attention of the humblest one-room rural teacher and of the university president.

#### *Vitalizing Professional Teaching*

The field of professional training on the university level offers conspicuous opportunity for the use of this new device. Several pictures have been prepared showing eminent surgeons performing operations, and they have been warmly received by the faculties of medical schools. A director of a school of nursing has called attention to the need for a series of talking pictures demonstrating the standard tasks the student nurse must perform. At the suggestion of deans of schools of education a talking picture has been made, reproducing a lesson taught by an expert teacher, showing the actual reactions of pupils, to be used as a model lesson to accompany a course on methods of teaching offered in teachers colleges.

But it is the directors of university extension courses who demand most insistently that the talking picture be adopted as a technique of higher education. They are interested in bringing education to the masses. They are constantly besought to arrange courses of instruction in communities remote from the campus. These courses must be given by members of the university faculties. Already burdened by duties on the campus, a university professor can meet only a few outside demands, and then at the expense of considerable railroad fare and physical energy. If he could make a talking picture of his course, or certain parts of it, the extension division could use it in a dozen communities simultaneously, not replacing the instructor entirely but multiplying his services many times and permitting him to appear in person at a greater number of places.

#### *Educational Adaptations Are Many*

Teachers institutes that cannot afford to invite outstanding educators to address them could keep abreast of progressive movements in education through short talking picture units made by experts, rented at nominal cost.

It is easy to let one's imagination dwell on the educational adaptations of this new achievement of man's inventive genius. But let us turn to certain general principles that must underlie its successful production and operation.

1. It must serve in a unique way. The talking picture must render a new service if it is to survive. It must not duplicate any form of instruction now existing. Speaking positively, we may lay down the proposition that the talking picture, to be practically useful, and not merely a novelty, must introduce a form of instruction not provided by any existing medium. It can surely do this, for it is an unusual combination of elements, and just as preceding inventions have won their places in education by the uniqueness of their contribution, so can the talking picture make way on its peculiar merits. It will never replace textbooks, but it may supplement them. Books are often dry and uninteresting. The interest can be supplied by the talking picture because of the ease with which it can dramatize materials.

#### *A New Tool for the Teacher*

The talking picture can never replace the alive and active teacher. Garfield's characterization of a college as Mark Hopkins on one end of a log and a boy on the other will always be appropriate. The talking picture will not replace the teacher any more readily than did the introduction of the blackboard. It will rather give him a tool with which to make his instruction more pointed; and it will relieve him from the repetitious rôle of rote master. It will conserve his time and energy so that he can give more attention to each pupil as an individual. According to the old régime a teacher was supposed to teach subjects. The new philosophy of education is that the teacher should teach pupils; that he should discover differences between them and help each pupil to develop himself along the lines of his particular potentialities. The present stress is on individual guidance. In order to accomplish this aim the teacher must be given all possible aids to efficiency and must reduce the mechanics of subject matter to a minimum.

2. It must be dramatic. One of the peculiar virtues of the talking picture is that it is a medium through which materials may readily be dramatized. Young people are accustomed to seeing talking pictures in dramatic form, and they would expect it in any educational talking picture. Their intuitive demand is sound pedagogically. Accordingly, educational talking pictures should be dramatic, prepared by dramatists as well as by educators.

3. It must improve the quality of instruction. Another supreme advantage implicit in the talking picture is that through it instruction can be given by the masters. The outstanding person in each field may be brought into every schoolroom, thus raising the quality of instruction.



Here is shown a reading study group of boys and girls as they appear in the talking picture, "A Case for Professional Study, Sixth Grade."

4. It makes possible democratic education. More persons are enabled to receive an education, thus fulfilling one of the democratic aims that is at the foundation of our republic. Of particular importance is the ease with which educational talking pictures can reach adults as well as children.

#### *The Value of Repetition*

5. It permits frequent repetition. From the point of view of the psychology of learning, a pronounced advantage in the talking picture is that it permits of repetition of materials as often as is necessary without requiring the teacher to use his valuable time to conduct such repetitions. This is especially important in classes where pupils progress at uneven rates. Investigations have well established the fact that some pupils need four times as many repetitions as others do. Thus their individual needs are met by means of the talking picture.

6. Each repetition is exactly the same. An additional feature of prime importance from the psychological point of view is that through the talking picture the materials are presented in exactly the same way on each repetition. The impression is always clear and always the same, thus facilitating exact recall.

7. The talking picture would widen the curriculum of many schools. Administrators in many schools would like to introduce certain courses in

health, thrift and physical education, but they lack funds with which to hire additional teachers and to buy new equipment. It is conceivable that their needs might be met in part by a library of talking pictures, which might be owned by the state department of education and let for a time.

8. Pupils learn through the ear as well as the eye. Most educators agree that the motion picture has value as an educational device. One of their chief arguments has been that it enables the pupil to learn through the eye. The talking picture has this merit, plus the additional one of permitting the pupil to learn through both the eye and the ear.

9. Subject matter and methods may be standardized. There are certain features of our educational program that it is desired to standardize. Some states desire to have certain elements of instruction common throughout the state. Some cities and some counties maintain standards throughout their respective areas. Such standardization may be greatly facilitated if every school is equipped with talking pictures that show uniform material.

#### *Possibilities Are Unlimited*

10. Economies may be effected. Finally should be mentioned the economies that may be brought about by this new means of instruction. By various examples, attention has been called to the ways in which this may be accomplished: aboli-



tion of superfluous repetition for pupils who do not need it; provision for sufficient repetition for those who do; freeing the teacher from exacting details regarding curriculum so that he can give greater attention to individual differences; permitting instruction to be given to larger groups than can be handled by one teacher; educating great numbers of persons at a distance; lessening the cost of giving extramural education; enlarging the curriculum in case new teachers cannot be added.

No one can foresee all the changes that will be made in adapting this fascinating new invention to the ends of education. The possibilities are so great as to stagger the imagination. In order that they may materialize the combined efforts of engineers and educators will be required. Important projects are already being undertaken and we may confidently expect that in a very few years the talking picture will be as firmly established in the educational world as are playgrounds and athletic fields.

### Commission Approves Vocational Education in Missouri

BY GEO. W. REAVIS, STATE DIRECTOR, VOCATIONAL EDUCATION, JEFFERSON CITY, MO.

The state survey commission appointed by Governor Henry S. Caulfield, Missouri, to study and report upon the needs of the public schools of that state, has recently issued a report and recommended certain changes in the present system. This survey was made by experts from Columbia University, New York City, for the state, and concerned vocational education as it is carried on under the provisions of the federal law granting subsidy for vocational training.

The following endorsement is made:

"In Missouri, vocational education is definitely a part of the program of secondary education. There is a crying economic need for vocational education. The two great assets of a nation that enter into the production of wealth, whether agricultural or industrial, are natural resources and human labor. The conservation and full utilization of both of these depend upon vocational training. This vocational training is required to conserve and develop our natural resources, to prevent waste of human labor, to increase wage earning power, to meet the increasing demand for trained workmen, to offset the increased cost of living, as wise investment and because our national prosperity is at stake.

"This vocational education is needed to democratize the education of the country by developing

a better teaching process through which children who do not respond to book instruction alone may be reached and educated through learning by doing, by introducing into our educational system the aim of utility to take its place in dignity by the side of culture and to connect education with life by making it purposeful and useful.

"Agricultural schools are fairly well distributed geographically, there being only thirty-two counties that do not have one or more such schools. In view of the vocational importance of agriculture in Missouri, the number of schools or classes and the number of students enrolled in them, should be increased materially. Satisfactory standards have already been set up by the state department and these standards should be maintained. It is evident the program of vocational education in home economics in Missouri is in need of considerable expansion if it is to fulfill its purpose.

"Courses in vocational education for trades and industries are offered in only nineteen centers in Missouri. This is natural and proper in a state given over almost entirely to agricultural pursuits, outside the few large centers."

It is evident from these statements that the commission is in hearty accord with the extensive program now being carried on in vocational training in Missouri and these opinions coincide with those of taxpayers who know from personal experience the value of vocational education. Most citizens do not know or realize how much the federal government aids the different states in the support of education. It has done and is still doing much to cooperate with the states in extending subsidy for many programs of merit.

Since the passage of the Smith-Hughes Act in 1917 the outlook for vocational training has been brighter.

### Married Women Teachers Win in Recent Decision

That no discrimination shall be made against married women teachers in the public schools of Gloucester, N. J., is the tenor of a decision made recently by Dr. Charles H. Elliott, commissioner of education for New Jersey, against the Gloucester city school board.

Ten married women teachers charged that their salaries had not been advanced to the same extent as that of other teachers of the same rating. The board was ordered to pay the appealing teachers for the school year, beginning September 1, on the same basis as other teachers of similar ability and doing like work in the school system.

# Recent Laws That Affect the Teacher Directly

*The preparation of teachers, their contractual status, salaries and the retirement of aged and disabled teachers have all been dealt with in legislation passed since 1926*

BY WILLIAM G. CARR, ASSISTANT DIRECTOR, RESEARCH DIVISION, NATIONAL EDUCATION ASSOCIATION

SCHOOL legislation may affect teachers directly or indirectly. Changes in administrative units, in methods of securing school revenues or in the required subjects of the curriculum affect teachers indirectly. On the other hand, legislation which fixes minimum teachers' salaries, prescribes teacher training and certification requirements, describes the teachers' contractual status or sets up a retirement system for teachers may be said to affect the profession directly. This article describes certain significant legislation directly affecting teachers, enacted since 1926.<sup>1</sup>

State legislation directly affecting teachers ordinarily includes regulations concerning: (1) the preparation of teachers, including their training and certification; (2) the teachers' contractual status, including protection of tenure and provisions for leaves of absence; (3) teachers' salaries, which are generally regulated only in minimum terms; (4) retirement of aged or disabled teachers.

## *Higher Standards Are Demanded*

Higher standards for entry into the teaching profession are the outstanding characteristics of recent legislation affecting the training and certification of teachers. This has been accomplished, in the main, by these three methods: providing better facilities for teacher training institutions, lengthening required training courses and abolishing lower grades of certificates.

The minimum training requirements for certification have been raised recently by legislative enactment in many states. For instance, in 1928 Idaho fixed a minimum of one year of normal school training for elementary school teachers, and in 1929 this requirement was extended to two years. Oregon enacted a steadily increasing series of requirements for beginning elementary

teachers which required forty-eight weeks of training after January, 1929, and which will require sixty weeks after January, 1931, and seventy-two weeks after January, 1933. In 1929, Alaska and Iowa both fixed minimum training requirements of twelve semester hours. Higher requirements were also enacted in Illinois.

## *Fifteen States Have Civic Requirements*

There is some tendency to add civic requirements to the standard of training required for certification. New civic requirements were recently imposed by law in three states, making a total of fifteen states with such requirements in force. The type of required evidence of loyalty varies. In some states none but American citizens may receive certificates. In others, a declaration of intention to apply for citizenship is also accepted. In still other cases an oath of allegiance to the Federal Constitution is required. Recent legislation illustrates each of these three methods. New Jersey in 1928 required all permanent public school teachers to be citizens of the United States.<sup>1</sup> In 1929, Indiana required all candidates for certificates and all instructors in state supported schools to take an oath of allegiance and Texas forbade the issuance of permanent certificates to aliens. Temporary certificates, however, may be issued to aliens who have declared intention of becoming citizens of the United States.

Scholarships for prospective teachers have been fixed by law in several states. Arizona created one teacher training scholarship in the state university for each county in the state. The value of each scholarship was fixed at \$1,000. Florida has teacher training scholarships in each state senatorial district. Connecticut has had for some years a normal school scholarship of \$150 a year with three years of teaching service in a small town required of the scholar following graduation. By a 1929 enactment this scholarship was doubled in amount and the period of subsequent

<sup>1</sup> Secondary sources: Thiel, Richard B., *Recent Progress in Educational Legislation*, *The NATION'S SCHOOLS*, February, 1928; Keeseecker, Ward W., *Review of Educational Legislation, 1926-1928*, United States Office of Education, Bulletin, 1929, No. 27, Government Printing Office, Washington, D. C.; National Education Association, Research Division, *State School Legislation, 1929*, Washington, 1929, *Studies in State Educational Administration*, No. 1.

<sup>1</sup> An exception is made in favor of teachers of foreign languages who have been residents of the United States less than ten years.



teaching service was fixed at two years in a one or two-teacher school. In 1929, the Vermont State Board of Education was authorized to award scholarships to worthy normal school students for the second year of study.

The authority of the state in matters of certification is steadily increasing. The arguments generally advanced in favor of exclusive state control of certification are these:

1. Local certifying officials are likely to be subject to pleas for patronage and other forms of political and personal pressure.
2. Local certification hinders the free movement of teachers from community to community.
3. Local certification is a barrier to the development of interstate reciprocity in certification.
4. Local certification results in grossly unequal teaching staffs in various local units.
5. State certification is efficient and economical.
6. State licensing for lawyers, dentists and physicians is accepted as desirable. Why not for teachers also?
7. State certification coordinates properly with state teacher training, state minimum salaries, statewide tenure protection and state teacher retirement systems.
8. State certification is in line with the historical development of our state school systems.
9. State certification alone makes possible a farsighted program of adjustment between the supply of and the demand for teachers.

It appears that these considerations are finding general acceptance.

#### *Giving State Boards Certifying Authority*

In 1929, four states enacted important legislation to this end. Oklahoma retracted the certifying authority formerly held by county superintendents and city boards of education and vested it in the state board of education. In Michigan, the county certification laws were repealed so that now there are in that state only three certifying authorities: the state university, the state superintendent of public instruction and the state board of education. An important new law in Minnesota centralizes all certifying authority in the state department of education. In Utah, the law empowering city examining boards to issue teaching certificates was repealed, leaving the state board of education the sole certifying authority.

Legislation concerning the teachers' contractual status centers around the problems of tenure and leave of absence. Recent years have witnessed much legislative controversy over the proper safeguards for teachers' tenure. For example, in

1927 California revised its tenure laws to include all certificated employees and repealed the statutes of 1921 which limited the application of the tenure law to districts employing eight teachers or more. In 1929, bills were introduced into the California legislature to repeal these statewide tenure laws. Although these bills failed to pass, the legislative criticism has stimulated California school people to investigate present tenure conditions and to weigh the merits of the present law. A parallel crisis occurred in the 1929 Indiana legislature. In Indiana also the friends of statewide tenure were able to retain the statewide tenure law which had been on the statute books for two years. In Indiana, too, a study of the tenure situation is contemplated as a basis for recommendations to the next legislature.

#### *Laws Relating to Tenure*

The idea of indefinite or continuing tenure has recently been given legal form in Montana, Nevada and Pennsylvania. This type of law differs from the so-called "permanent" tenure legislation in that it removes the necessity for annual elections of all teachers, while at the same time it gives the teacher no legal right to the position. The Montana law, enacted in 1927, specifies that after three years of continuous service a teacher is deemed reelected unless definitely dismissed by action of the employing board before May 1. Nevada in 1929 required school boards to notify teachers before May 15 concerning employment for the ensuing year. In case the board fails to act the teachers may consider themselves reelected for another year on the same terms and are required to present their acceptance to the board within ten days. A slightly different tenure law was enacted in Pennsylvania in 1929. This continuing contract law states that contracts between employing boards and teachers remain in full force year after year unless terminated by written notice from either party on or before the close of the school term. This law thus avoids the necessity of the annual election and reelection of all teachers.

Very encouraging is the recent legislative interest in improvement of teaching through granting leaves of absence for sickness, for advanced study, for travel or for recreation. In the year 1929 alone, legislation creating more favorable conditions with regard to leaves of absence for teachers was enacted by at least five state legislatures, although subsequently annulled by the governor's veto in one of these five states. The governor of California vetoed two leave of absence bills which were designed (a) to make sabbatical leave permissive in local school districts and (b)



to grant leaves of absence to faculty members of state teachers colleges and other state schools on the same terms as to employees of school districts.

Successful leave of absence legislation took place in 1929 in Florida, Maine, Wisconsin and Nevada. In Florida, the granting of five days' sick leave yearly with pay was made mandatory. Permissive legislation was enacted in Maine and Nevada. In the former state, school boards may now grant sabbatical leave on as much as half pay and may adjust salaries of school employees absent on sick leave. In Nevada, school boards may pay teachers for time lost up to ten days if the absence is due to illness or death in the immediate family. The ten-day allowance is cumulative year by year up to thirty days. In Wisconsin, the workmen's compensation law was amended so that school boards are permitted to pay teachers full salaries during disability.

Recent legislation involving state regulation of teachers' salaries is scanty in amount and, generally speaking, involves the introduction of no new principles. Delaware in 1927 and West Virginia in 1929 provided for the uniform application of salary schedules in force within districts without discrimination on account of race. The Hancock Law enacted in North Carolina in 1929 provides a state salary schedule based on training and experience. School districts that participate in the state equalization fund may not exceed the state salary schedule by more than five per cent. Modifications of state salary laws were also enacted in Colorado, Nevada, California, Kentucky and Pennsylvania.

#### *Teacher Retirement Is a Live Subject*

With the possible exception of school finance, no topic of school legislation has recently attracted more widespread interest than teacher retirement. Legislation dealing with the retirement of teachers was considered by thirty out of forty-six state legislatures meeting in 1929.

New state or territorywide teacher retirement systems include Hawaii (created 1926), Maryland (1927), Kentucky (1928),<sup>1</sup> Alaska (1929) and Michigan (1929).<sup>2</sup>

Recent legislative enactments affecting systems already in operation include extensions of the systems and increases in retirement allowances. Extensions authorized in 1929 include the creation of an emeritus classification for presidents of state teachers colleges in Arizona and Illinois, extension of retirement provisions to librarians and certain other school employees in California, and

revision of the Iowa permissive retirement law to include cities as small as 25,100. Recent increases in annual retirement allowances occurred in Vermont (minimum increased to \$200 in 1929), District of Columbia (1926), Maine (increases of from \$50 to \$100, 1927) and Rhode Island (minimum pensions increased to \$500, maximum to \$700).

That the next few years will witness no diminution of interest in teacher retirement is indicated by the number of unofficial and official commissions investigating the matter. For instance, official investigating commissions were authorized in 1929 by legislative enactments in North Dakota, Delaware and Michigan. Bills to create statewide retirement systems were introduced without success in the 1929 legislatures of eight states.

#### *What General Situation Shows*

The general situation with respect to retirement legislation is this. States without retirement laws are carrying on the basic investigations and publicity work necessary to secure such laws. States which have retirement laws are revising them.

Recent state legislation directly affecting the teacher presents a diverse and somewhat confusing picture. Yet one discerns these nine general trends:

1. Standards for entry to the teaching profession have been raised.
2. Encouragement for young people to prepare for teaching is being supplied by teacher training scholarships in several states.
3. Civic requirements for teachers have been adopted in some states.
4. The responsibility of state agencies is being substituted for local authority in the certification of teachers.
5. The desirability of granting leaves of absence to teachers is receiving legislative recognition.
6. The so-called "permanent" tenure laws in some states are being subjected to criticism and this criticism has stimulated the inauguration of investigations seeking a solution of the problem.
7. Several new state tenure laws are based on the idea of indefinite rather than permanent tenure. The necessity for an annual election is abolished without giving teachers a vested legal right to their positions.
8. There is an active campaign in progress in many states to secure statewide teacher retirement legislation.
9. Several of the states which now have teacher retirement laws have made revisions in their administrative and financial provisions.

<sup>1</sup> The Kentucky law is inoperative due to failure to provide public funds.

<sup>2</sup> The Michigan law reenacted a former law which was inadvertently repealed in 1927.

# Surveying the Trends in High School Curricula

*This study of the distribution of California teachers according to the subjects taught demonstrates the relative importance of each field as well as the general curricular changes*

BY C. G. SHAMBAUGH, MAYFIELD, CALIF.

THE teacher is the heart of the school. Fine buildings and suitable equipment play an important part, but they can in no way take the place of thoroughly trained efficient teachers. Increasing attention is being given to scientific curriculum construction. The shifting of emphasis on content and the radical changes in the methods of teaching call for a corresponding change in the training of teachers.

The trends in the high school curriculum may be measured by the number of teachers employed in each field. A continuous check on the probable demand for teachers is necessary for the protection and promotion of the best interests of both the pupils and the teachers.

If the teaching profession is to continue to attract the most capable men and women, some assurance must be given that the student who spends several years in special training will be able to secure the position for which he is fitted. The number and the kinds of teachers needed should be known to our educational counselors. The pupil entering high school to-day may be ready for teaching eight years from now. If he is interested in becoming a teacher, he should be advised intelligently as to the relative demand for teachers in the field of his interests.

## *How Many and What Kind of Teachers?*

The administrators of teacher training institutions, in formulating their educational policies, must take into consideration the number and kinds of teachers that will be utilized in the public school system. In measuring the demand for secondary teachers, it is essential to know the number and kind of teachers needed for each field of the curriculum. This information is necessary in order to avoid an oversupply of teachers in certain fields and an undersupply in other fields. Without this knowledge, it is impossible to formulate an intelligent program of teacher training.

The purpose of this investigation is to show the trends in the high school curriculum as they may be indicated by the percentage of California high school teachers employed in each field. The dis-

tribution of teachers according to the subjects taught will show the relative importance of each field as well as the general trends of the curriculum.

## *What the Study Includes*

This study includes only teachers employed in the regular four-year high schools and in the senior high schools. It does not include teachers of the junior high schools or the junior colleges. This analysis of teaching positions is limited to the four school years 1913-14, 1919-20, 1927-28 and 1928-29. These four years, so distributed, are sufficient to show the teaching situation and should indicate any trends that may be present. The year 1913-14 was chosen in order to secure a record of the teachers and curriculum before the influence of the World War was felt. The school year 1919-20 was used since it is near the center of the time extending from 1914 to 1927 and should reveal the influence of the war. The two recent years, 1927 to 1929, inclusive, were included in order to determine the distribution of teaching positions at the present time.

The data were taken from the California secondary school directories<sup>1</sup> for the four school years included in this study. One of these directories was published by the California State Board of Education, while the others were published with the cooperation and under the direction of the California State Department of Education. All the data were furnished by high school principals or by county superintendents. Thus the information given in the California directories is more reliable than if the data had been collected from the various teachers by some private individual.

The data for the directories were gathered in

<sup>1</sup> D. C. Heath and Company, compilers, *Heath's Directory of California Secondary and Normal Schools for 1913-14*, D. C. Heath and Company, San Francisco. A. C. Olney, compiler, *Directory of Secondary and Normal Schools for the School Year 1919-20*, November, 1919, California State Printing Office, Sacramento, 1919. Horace M. Rebok, managing director, *Directory of Public Secondary Schools in the State of California for the School Year 1927-28*, February, 1928, published by the California Society for the Study of Secondary Education, 2163 Center Street, Berkeley, Calif. Horace M. Rebok, managing director, *California School Director for the School Year 1928-29*, November, 1928, published by the California Society of Secondary Education.

the Fall of each year. By a special check against other records, it was found that the high school directories contained at least 99 per cent of the names and teaching positions of all the high school teachers employed in the Fall of each year. Since so nearly all of the high school teachers were included in this investigation, entire confidence may be placed in the evidence presented.

The subject or combination of subjects listed with each name in the directory was checked carefully and tabulated separately for all senior high school teachers. While some variation was found from year to year in the terminology used for the classification of the various subjects of the curriculum, by exercising care it was possible to compile the data in such a way that they are comparable for the various years.

In order to determine the percentage of teachers employed in each field of the curriculum, it is necessary to know the total number of teachers actually conducting classes for the years included in this study. This information is shown in Table 1.

#### *How Teachers Are Distributed*

In considering the distribution of teachers, it is of value to know the percentage of teachers whose teaching load is limited to any one field of the curriculum and the percentage whose teaching load includes the given field and any other field. This arrangement not only will show the relative importance of each field, but will indicate also the opportunities for teaching in any one field in combination with other fields. It

may be assumed that the relative number of teachers employed is an indication of the prominence of each field. However, in using this as a measurement, one should bear in mind the fact that the teacher of English or of social science probably has more pupils under her supervision than does the teacher of the natural sciences. While this study does not show the actual number

TABLE 1—NUMBER OF HIGH SCHOOL TEACHERS CONDUCTING CLASSES

1913-14	1919-20	1927-28	1928-29
2,665	4,424	9,351	9,730

These totals were taken from the secondary school directories for the years included in the study, by counting the number of teachers actually conducting classes or having charge of the library. They include only teachers employed in the Fall of each year.

of pupils enrolled in each major subject, it does show the percentage of high school teachers employed in each field, thus indicating accurately the variation in emphasis being given to each field of the curriculum.

The data in Table 2 show the percentage of senior high school teachers whose teaching load is limited to one field and the percentage who are employed in more than one field. Let us consider some of the important features of the data.

1. The figures in the bottom column of Table 2 indicate that the teaching load for a constantly larger percentage of the high school teachers is being limited to one field of the curriculum. One may observe that in 1913-14 the teaching load for 62.5 per cent of all the teachers was limited

TABLE 2—PERCENTAGES OF CALIFORNIA HIGH SCHOOL TEACHERS TEACHING IN ONE FIELD AND THOSE TEACHING IN MORE THAN ONE FIELD\*

Subject a	1913-14			1919-20			1927-28			1928-29		
	One Field Only b	That Field Plus Others c	Total d	One Field Only e	That Field Plus Others f	Total g	One Field Only h	That Field Plus Others i	Total j	One Field Only k	That Field Plus Others l	Total m
English .....	9.7	12.4	22.1	10.0	11.0	21.0	12.4	6.6	19.0	12.5	5.7	18.2
Mechanical and industrial arts, and agriculture ..	8.4	9.3	17.7	8.1	5.2	13.3	9.8	3.4	13.2	11.8	2.0	13.8
Commercial and penman- ship .....	8.6	7.4	16.0	9.0	4.9	13.9	8.4	2.9	10.3	9.1	1.5	10.6
Physical education .....	1.9	2.1	4.0	4.0	10.0	14.0	7.2	5.7	12.9	8.1	4.0	12.1
Home economics and do- mestic science .....	3.6	1.5	5.1	5.9	4.4	10.3	5.3	1.5	6.8	4.2	1.1	5.3
Social science .....	4.3	12.0	16.3	4.5	9.0	13.5	6.8	6.2	13.0	8.1	5.1	13.2
Mathematics .....	5.4	12.6	18.0	5.6	9.7	15.3	5.8	5.7	11.5	6.3	4.0	10.3
Laboratory science .....	6.0	10.1	16.1	6.1	8.1	14.4	7.1	4.9	12.0	7.3	3.5	10.8
Foreign languages .....	8.6	13.9	22.5	7.1	9.5	16.6	6.2	5.0	11.2	5.9	3.9	9.8
Music .....	3.5	2.1	5.6	4.7	2.1	6.8	5.2	1.4	6.6	5.2	1.1	6.3
Drawing, art .....	1.7	6.5	8.2	1.5	4.5	6.0	2.3	2.4	4.7	2.5	0.7	3.6
Librarian .....	0.7	0.2	0.9	0.8	1.1	1.9	1.3	0.5	0.8	1.3	0.4	1.7
Hygiene and home nursing	...	...	...	...	...	...	0.6	0.3	0.9	0.6	0.2	0.8
Vocational guidance ....	...	...	...	...	...	...	0.3	0.2	0.5	0.2	0.3	0.9
Total .....	62.5	...	...	67.4	...	...	78.9	...	...	84.3	...	...

\* The percentages in this table are based on the number of teachers actually conducting classes or having charge of the library. They do not include the administrators who have no classes.



to one field of the curriculum, while in 1928-29, 84.3 per cent of all the high school teachers were in this class.

This increase has been quite noticeable during the past fifteen years. However, it does not seem reasonable to expect that the relative number of California teachers whose teaching load is limited to one field of the curriculum will greatly exceed 85 per cent. The large number of small high schools in California creates a permanent demand for a number of teachers who are trained in more than one field of the curriculum. Koos<sup>1</sup> calls attention to the fact that 21.1 per cent of all the high schools of California had an enrollment of less than 100 pupils in 1927, while 12.2 per cent of all the high schools had five teachers or

TABLE 3—SUBJECTS RANKED ACCORDING TO THE NUMBER OF TEACHERS GIVING FULL TIME TO EACH\*

Subject	Rank 1913-14	Rank 1928-29
English .....	1	1
Mechanical and industrial arts, and agriculture .....	4	2
Commercial, penmanship .....	3	3
Physical education .....	10	4.5
Social sciences .....	7	4.5
Laboratory sciences .....	5	6
Mathematics .....	6	7
Foreign languages .....	2	8
Music .....	9	9
Home economics and domestic science .....	8	10

\* These rankings are based upon the percentage of teachers devoting all of their time to one field of the curriculum, as shown in columns *b* and *k* of Table 2.

less. Owing to the sparseness of population in many rural communities, many of these small high schools probably will remain in existence. The assumption seems reasonable that in the immediate future approximately 15 per cent of the high school teachers will be required to teach two or more subjects of the school curriculum.

While it is of value to know the relative demand for teachers in each major subject, this knowledge is of little value unless teachers are certificated to teach only in the fields for which they have been especially trained. A further investigation should be made of this phase of the problem of teacher training and certification.

2. The growing emphasis on health education is shown by the large increase in the number of physical education directors and by the appearance in the curriculum in recent years of the subjects of hygiene and home nursing.

3. Since a great variation occurs in the way in which guidance and counseling may be carried on in the various schools, no doubt much more is

done in the field of counseling than is indicated by the number of teachers who are listed as counselors in the high school directory for each year. A more reliable estimate of the demand for counselors may be gained from the data compiled by Martens and Proctor.<sup>1</sup> They found that of the 262 high schools answering a questionnaire in 1929, 37 per cent had special counselors.

4. One of the interesting features of the data in Table 2 may be observed by comparing the ranking of the ten most popular subjects of the curriculum for 1913-14 with a similar ranking for 1928-29. Table 3 contains this analysis and shows that no great shifting of emphasis has occurred between 1913-14 and 1928-29. The same ten fields constitute the first ten most popular fields at both dates. The field of industrial and mechanical arts has increased from fourth in rank in 1913-14 to second in rank in 1928-29, while physical education has increased from tenth in rank to 4.5. The greatest decrease is shown in foreign languages, which shifted from second in rank in 1913-14 to eighth in rank in 1928-29.

## The Great Need for Employing the Right Kind of Teachers

That superintendents are devoting too little time to searching for high grade teachers and that they are making too little use of the organized services that are available for directing their search is the belief of J. B. Edmonson whose editorial on "The Superintendent's Greatest Opportunity" appears in the *University of Michigan School of Education Bulletin*.

"There is no doubt that a capable superintendent could raise the quality of instruction in any school employing twenty teachers," he writes, "if the board of education granted him the following powers: unqualified authority to nominate all members of the teaching staff; freedom to use at least ten days and to spend \$300 for traveling expenses in actual search for promising teachers; authority to offer a competent teacher from \$50 to \$100 more in annual salary than is paid in schools of comparable standing.

"May I suggest to the superintendent who needs more time and money for finding the right kind of teachers that he present the problem to his board of education and seek to convince his board that in the selection of his teachers the superintendent has his greatest opportunity to render service to his school."

<sup>1</sup> Koos, Leonard V., *Secondary Education in California, Report of a Preliminary Survey*, p. 41, Table 17, California State Department of Education, California State Printing Office, Sacramento, 1929.

<sup>1</sup> Martens, Elise H. and Proctor, William M., *Six Years' Progress—the Present Status of Counseling in the High Schools of California*, California Quarterly of Secondary Education, p. 27, The California Society of Secondary Education, Berkeley, June, 1929.

# Planning a School and Playground Expansion Program

*The city plan should be of immense benefit to the school board in helping it to select new school sites and to determine needed facilities*

BY GEORGE B. FORD, NEW YORK CITY

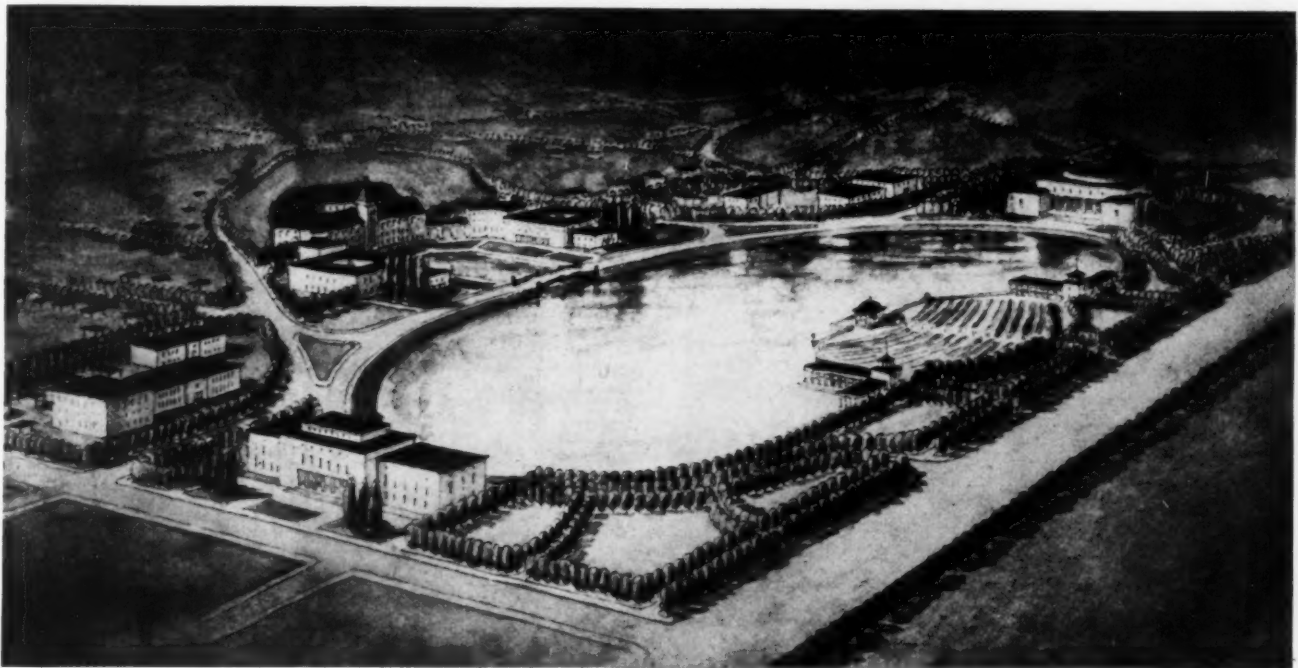
IT IS the duty of the board of education in any city to select new school sites and to determine when the new facilities shall be made available. Obviously the board is better qualified than any other group to undertake this service. However, even with the utmost care and thought and with the best of intentions, it has often proved difficult for a school board to avoid mistakes in the selection of school sites because of the limited information available concerning the probable future development of the city.

In cities that have planning boards it has been found that this board can be of material service to the school board in placing at its disposal not only a mass of new information and studies with regard to the character, direction and intensity of growth of the city but also with regard to the desirable development of the city. The future population growth and distribution studies, the plans for thoroughfares, parks, parkways and play fields, the studies of transportation and

transit facilities offer a new basis for prognostication far more accurate than anything heretofore available.

It is important from the standpoint of the city plan that the location and size of schools and their plots be determined in accordance with the city plan as a whole. A school should not be located on what may become a main artery or in an eventual business or industrial district. Often a school can be combined to good advantage with a park or a playground. The limits to the income of any city necessitate balancing expenditures for new schools with those for other important public improvements, if the city is to work out a practical as well as a comprehensive long term capital budget.

The planning board, therefore, in its problem of locating all public buildings from the standpoint of the city plan should first make a point of finding out just what are the basic policies the board of education desires to maintain, and



*Here is a suggestion for the grouping of buildings and landscape development around the new senior high school in New Rochelle, N. Y. The school faces an open air theater.*



Map showing the areas served by schools and the distribution of school districts.

should then use these as a point of departure in its studies of school location in relation to the rest of the city plan.

The following assumptions are customary in such a study of the school and school yard expansion program:

1. That a comprehensive zoning plan will be in effect and that the rest of a comprehensive city plan will be carried out at least in its major features.

2. That the population growth and the population distribution studies upon which the estimates for future enrollment are based are reasonably accurate.

3. That there will be no considerable reduction in the size of families.

4. That there will be no radical change in the public school attendance tendencies, that is, that the proportion of the various age groups attending public schools at present will remain about the same. This also includes the assumption that about the same proportion of the school-age population will attend parochial and private schools as at present.

5. That the present boundaries of school districts can be adjusted to changing conditions.

To obtain full information concerning existing conditions with respect to the present school plan the following data are currently recorded for each school: name of school; location; number of permanent classrooms; capacity of permanent classrooms; number of permanent seats; grades in school; enrollment and attendance; seats needed or now vacant; present population in school district; area of plot in acres including building; net play area now needed.

#### *Determining the Enrollment Factor*

From this data the enrollment factor can be determined for the various school districts. The enrollment factor represents the proportion of the total population of a school district enrolled in the school. These factors vary considerably in different parts of the city depending on the nationality and social and economic status of the inhabitants. They should be corrected in accordance with any tendency to change that a given district may show. The multiplication of these enrollment factors by the estimated future population of each district presents a fair approximation of future local conditions respecting schools and school yards.

Before an attempt is made to distribute future schools the following standards may be assumed with regard to the size of schools and their play yard spaces:

1. A desirable size for elementary schools is



## SEATING CAPACITY OF EXISTING SCHOOLS, NEW ROCHELLE, N. Y., 1929

		Seats	Registration April 1929	Extra Seats
Senior High School .....	32 × 30 =	960	1,087	-127
Central J. H. S. ....	38 × 30 =	1,140	902	+238
I. E. Young J. H. S. ....	30 × 30 =	900	793	+107
Columbus J. H. S. ....	14 × 30 =	420	203	+217
Trinity school .....	21 × 35 =	735	584	+151
Washington .....	19 × 35 =	665	584	+ 81
Huguenot .....	14 × 35 =	490	413	+ 77
Jefferson .....	14 × 35 =	490	565	- 75
Lincoln .....	22 × 35 =	770	607	+163
Mayflower .....	19 × 35 =	665	705	- 40
Columbus .....	21 × 35 =	735	863	-128
Roosevelt .....	11 × 35 =	385	367	+ 18
Stephenson .....	19 × 35 =	665	622	+ 43
			8,295	

one with a seating capacity of 800 or possibly 1,000 pupils.

The size of junior high schools should normally be kept under 1,500 seats, although there appear to be few objections to somewhat larger buildings.

The maximum size for a senior high school is assumed as 2,500 or possibly 3,000 pupils, although 5,000 pupils is not considered to be an impossibility.

2. The capacity of regular classrooms used in the calculation of the number of rooms needed should be assumed to be thirty-five, thirty and thirty respectively for elementary, junior and high school grades, unless local economic conditions obligate a lower standard.

3. Play yard space should be provided in connection with each elementary and junior or senior high school on the basis of a minimum of 50 square feet per pupil in the elementary schools, 100 square feet per pupil for the junior high schools and senior high schools.

4. To provide for the proper setting of school

buildings, for adequate playground space and for possible future expansion, 4 to 5 acres should be assumed as the minimum size of plot for new elementary schools; 6 to 10 acres for new junior high schools and 10 to 20 acres for senior high schools, although even larger plots are highly desirable wherever land is cheap enough.

In determining the number of schoolrooms and buildings and the play space needed, an exhaustive study of the facts should be made to see where it would be more desirable to add to a present school and school yard, where to abandon an existing school entirely and where it would be better to build a new school.

In making these studies the following factors should be considered:

Adequacy of size of plot.

Practicability of shape of plot.

Topography and setting.

Reasonableness of cost of land.

Least number of existing improvements to be removed.

Adequacy of possible playground develop-

## INCREASE IN PUPILS AND ROOMS, NEW ROCHELLE, N. Y., ESTIMATED OVER A PERIOD OF TWENTY YEARS

	Grade School 64% of Total	Extra Rooms Needed in All	Junior High School 23% of Total	Extra Rooms Needed in All	Senior High School 13% of Total	Extra Rooms Needed in All	Total	Extra Rooms Needed in All
1930 ..	6,446	+ 21	2,316	- 5	1,310	+ 5	10,072	+ 21
1935 ..	7,629	+ 61	2,741	+ 9	1,550	+14	11,920	+ 84
1940 ..	8,753	+ 98	3,144	+23	1,778	+21	13,675	+142
1945 ..	9,817	+134	3,528	+35	1,994	+28	15,339	+198
1950 ..	10,763	+165	3,868	+47	2,186	+35	16,817	+247

ment on the same site or on an adjacent site.

Possibilities of using other existing public playgrounds or other city owned properties near-by for play space.

Avoidance of business and industrial districts and uses.

Avoidance of nuisances and also of hospitals and cemeteries.

Avoidance of the dangers of thoroughfare traffic and railroad grade crossings.

Location central to school district.

Accessibility.

Nearness to existing and proposed thoroughfares, transit and bus lines.

Taking the case of New Rochelle, N. Y., in particular, a study was made of a comprehensive report prepared in 1927, entitled "A School Building Program for New Rochelle, N. Y." Consultations were held with representatives of the school board, following which these conclusions were reached with regard to the expansion program:

#### *Planning for the Future*

The population of New Rochelle is increasing at the rate of more than 2,000 persons a year. The public school enrollment is a little over 16 per cent of the total population. This means that from 320 to 350 pupils will have to be housed each year. Over a period of fifteen years from 5,000 to 6,000 additional school children will have to be housed. This estimate is considered by some authorities to be conservative and will be increased by the expansion of the junior high school facilities already planned and by the provision of more ample kindergarten facilities. In other words, from ten to twelve new rooms must be provided each year just to catch up with the growth with no allowance ahead for the future.

At the present time in New Rochelle there are ten elementary schools, three junior and one senior high schools. Almost all of these schools are at least approaching capacity and the necessity for new schools has become apparent.

The accompanying map shows the areas served or not by existing schools and the distribution of school districts.

The present school board of New Rochelle has shown admirable foresight in the formulation of definite plans to provide for the future increase in registration. It has recently outlined a program for four new school sites for which most of the property has been purchased. Plans are now being drafted for the buildings necessary for future requirements.

The future school sites recommended by the planning board as a part of the comprehensive

plan are intended to be an indication of the kind of site and the location that is desirable from the standpoint of the city plan rather than a specific recommendation for the purchase of a particular piece of property. It is expected that when the school board has arrived at the point when it is actually ready to buy any specific new site or an extension to an existing one, it would use these recommendations as a point of departure. Furthermore, the actual size and shape of grounds as shown on the Comprehensive City Plan and the recommended dates of acquisition or construction are typical and relative and can be varied depending on conditions as they may be at the time the board of education is ready to purchase the property.

### What Are the Principal's Duties and Functions?

What are the functions and duties of a principal?

C. J. M. Kyle, of the Wise High School, Wise, Va., writing in the *Virginia Journal of Education*, classifies the principal's duties as follows:

1. Supervision of instruction: classroom management; instructional; classroom visitation; professional study and improvement; curriculum.
2. Administrative duties: pupil control and management; general management; teachers; janitor.
3. Clerical duties: supplies and repairs; reports and repairs; attending to mail; miscellaneous.
4. Teaching: regular substitute teaching; examinations.
5. Miscellaneous: professional; extra-curricular; parent-teacher work; community relations.

### The Mortality in Correspondence Courses

The mortality in correspondence courses is estimated to be 95 per cent—three million people and seventy million dollars, J. M. Kniseley, principal, Broadway Evening School, Seattle, Wash., emphasizes in a recent statement.

"Forty per cent of evening school students drop out in the first ten weeks presumably because they do not get what they want," Mr. Kniseley says. "Yet the number seeking knowledge and willing to spend time and money in the search is constantly growing. Can the state ignore this situation? There are problems involved vitally affecting large numbers of citizens and thereby affecting the welfare of the state."

# Why Travel Should Be Part of Every Educator's Equipment

*Americans have something to learn from the German practice of making organized study trips, which are undertaken because Germans enjoy travel and consider it an excellent method of learning*

BY JOHN LOUIS HORN, PROFESSOR OF EDUCATION, MILLS COLLEGE, OAKLAND, CALIF.

I DO not know whether the German people have always had the *Wanderlust*, although our use of their word might be evidence in that direction. At any rate they have it now. Always many persons in Germany are on the go, have just returned from somewhere or plan to take a trip or wish that they could do so.

Wandering is now part of all German school procedure and ranges from a weekly walk of an hour or two, in which the first graders observe neighborhood farming or industry, railways, roads, rocks, and trees, to rather lengthy trips undertaken by the students of the higher schools

to points of artistic or historic interest. Sometimes these trips actually take them out of the country for a week or two. The Germans are not wealthy but the government owns the railways and local communities everywhere have set up establishments where young people may stay over night. Germans are, further, willing to accept simple food and accommodations.

When I arranged last year to join a summer tour of German educational institutions under the American auspices of Teachers College and the German auspices of the *Zentralinstitut für Erziehung und Unterricht*, I was asked innumer-



The market place and town hall, Bremen.

Courtesy North German Lloyd





The famous Castle Stolzenfels, on the Rhine.

Courtesy North German Lloyd

able times what the object of the trip might be and what might be the motive of the German educational authorities in undertaking to arrange it for us. Did we intend to explain the American system of education to the Germans? No, I didn't think we did. Did the Germans want to explain their system of education to us? Well, I hardly thought that they were particularly anxious to do so. I really didn't know just what the answer ought to be. Personally, I was joining the party because I wanted to go to Europe, particularly to Germany, and I thought it might be more interesting to meet German colleagues and visit German educational institutions than to follow Mr. Baedeker.

When the tour began and I learned something of German ways in matters of education, I found the answer to these questions. The answer is that it was foolish to ask the questions. The Germans travel because they enjoy it and because they consider it an excellent method of learning. A group of them had made such a trip to America sometime before, had visited our educational institutions, and it seemed to them natural that a number of us might want to do the same thing in their country.

Teachers as well as pupils travel in Germany. No one forces them particularly into the job of traveling on the theory of "training in service."

They don't get "credits" for it. It is simply that they feel that they have something to gain by traveling together for professional advancement.

I have before me a charming booklet, containing reports of educational trips—*Studienreisen*—made by teachers under the auspices of the *Zentralinstitut für Erziehung und Unterricht* during the year 1925. This beautifully illustrated booklet of 160 pages describes eleven such excursions. It was written as a souvenir by some of the participants in these tours.

The *Zentralinstitut* is an educational organization with headquarters in Berlin and branches in one or two other German cities. It is unlike any American institution. It is not a governmental agency. On the other hand, its funds are all derived from the states of the German Federation which maintain it. Its object is to provide educational leadership and guidance in Germany. In the sense that it has no actual powers and that it operates on a national scale in a country whose educational systems are state controlled, it is somewhat like our national Office of Education, but it is a much more active body.

The institute undertakes and sponsors many practical ventures and establishes numerous contacts with the teaching profession. The study excursion (*Studienfahrt*) is one of scores of its activities. The work week (*Arbeitswoche*) is an-

other. It will perhaps interest the American teaching profession to learn something of these activities. I have in hand the institute's prospectus for the year 1929. The introduction states that the purpose of these trips is to give teachers the opportunity to study the agricultural, geographic, cultural and industrial aspects of regions of the country under expert guidance. Here is a list of the proposed trips:

Easter trip to the Bregenzer Forest, March 29 to April 7.

Trip to the Weser Hill country, May 21 to May 27.

Pedagogical trip to Vienna and environs, from May 20 to 27.

Rhine journey, July 6-12.

Trip to Norway, July 10-28.

Trip to Vorarlberg and West Tyrol, foothills of the Alps, from July 18 to July 28.

Trip to the Swabian Alb, July 22 to 27.

Main River journey, July 29 to August 3.

Trip to Rügen and Bornholm, August 11-17.

Berlin and Potsdam, August 20 to 27.

Economics trip, Aug. 3-8.

I shall translate the announcements of two of these trips in order to indicate what they promise, what the procedure is and what the inducements are for joining them. Almost at random I have selected the trip to Vienna and the economics study trip:

*"Pedagogical trip to Vienna and environs, May 20-27:* Leader, Oberschulrat F. Hilker, Berlin. The objective of this excursion is the study of the new educational experimentation going on in

Vienna and its immediate vicinity. Participants will meet on Monday, May 20, in Regensburg. Thence we shall travel by train to Linz, where we shall visit the teacher training institution of the Sisters of the Cross. From this point we shall go to Vienna by steamer sailing along the Danube.

"The school visiting in Vienna has been ar-

anged and organized for us by the city school superintendent. Visits will be paid to elementary and middle schools as well as to teacher training institutions and social welfare agencies, which in this city are part of the school system. We shall visit the orphanage maintained by the federal government at Trais Kirchen, in the vicinity of the city of Vienna.

"Detailed plans of schedule and daily programs will be published later. The trip is sponsored by the Austrian Ministry of Education and the Vienna City Board of Education. Fee for participa-

tion, twenty marks (\$5). Participants limited to twenty-five. Every effort will be made to keep the fares and living expenses moderate. The last day to register for this trip is April 20."

*"Economics study trip, October 3-8:* Leader, Ministerialrat Professor Richard Woldt, Berlin. This study week is organized by the central institute in cooperation with the institute for economics and social studies of the University of Münster. The objective of this trip is to secure



Scene in a park at Baden-Baden.

Courtesy North German Lloyd



The Brandenburger Gate, Berlin

Courtesy North German Lloyd

inspiration for practical instruction from close contact with outstanding aspects of contemporary industrial and economic life.

"We shall have here close at hand the environment in which man carries on labor in common with others. We shall study modern industrial life, including the various skills, the organization of the workers, and the vocational advancement and prospects of the individual worker, as well as the influence of modern industry on society and on family life. On three days we shall visit factories and workshops. These will include mining, smelting works, textile factories and examples of Americanism in production.

"Each visiting day will be preceded by a study day on which, through lectures and group discussions, we shall prepare for the particular visits of the following day. Münster will be headquarters throughout the week. Participants will be given the privilege of visiting the library and seminar rooms of the institute during the study days. The fee for participation will be fifteen marks (\$3.75) and the total cost about sixty marks (\$15). The first meeting will take place on Monday evening, October 2, in Münster, i.W."

I have said that in addition to these study excursions (*Studienfahrten*) the institute also organizes work weeks (*Arbeitswochen*). Under this plan, teachers of a given field as, for example, art or music or literature, make a study trip. In

this case they simply go together to one place where the conditions are congenial for study, and work. They take with them a leader and engage in a week of instruction, work and discussions for their mutual benefit. "The establishment of the work week," says the prospectus of the institute, "puts into practice the new pedagogical principles of learning by doing, and combines it with a pleasant way of using leisure time." (The week is, of course, always a week of school vacation.) "In small closed groups, organized on a purely voluntary basis, we discuss and clarify mutual problems. The members represent one field of instruction, and under expert leadership the program includes lectures, discussions and the exchange of experience. We always select a delightful location in the country whose isolation precludes distraction and aids in quiet thought."

I cannot do better, I think, than quote the announcements of one of these weeks as I did of the trips.

*Art in the Elementary School, May 18-27.* In Sieber, southern Harz Mountains. Leader, Art Instructor Fritz Pirner, Berlin. Plan of work: the new course of study in drawing and art work in free composition. (Here follow details from the course of study, to be dealt with.) Maximum number of participants, thirty. Last day to register, April 15. Fee, twenty marks (\$5). Board and lodging per day, 4:50 R.M. (\$1.15).



# An Accounting Device That Assures Flexibility in Purchasing

*The "general stores" procedure permits the buying of supplies at other times than the peak months of July and August, and it may assist in stabilization*

BY ARTHUR B. MOEHLMAN, PROFESSOR OF SCHOOL ADMINISTRATION AND SUPERVISION, SCHOOL OF EDUCATION, UNIVERSITY OF MICHIGAN

ONE characteristic of public business is its tendency towards formalism, red tape and rigidity. Whenever these bureaucratic attitudes show themselves in public management, there is a decreasing amount of flexibility. This condition is true of public education just as it is of other forms of public activity. Any tendency that elevates formalism to the detriment of flexibility is certain to decrease efficiency in organization and is also likely to become increasingly expensive.

In public education, this tendency is strongly revealed in the average accounting and budgeting system. Budgets are built for a certain period of time. The monies approved under these programs are not available until after the date upon which such allotments go into effect. On the other hand, supplies are needed at specific times regardless of budget. The schools are concerned that run ten months of the year and the time-use requirement is all important to them. Children and teachers are ready. If essential material is not supplied promptly then much time is lost. Any rigidity, therefore, interferes greatly with the efficiency of instruction by placing too much emphasis upon mechanics and not enough upon purpose.

## *Peak Load Is Expensive*

There is another commonly neglected side of the picture that is of great importance in the general scheme of things. This is represented by the problems created for supply, textbook and equipment corporations by these rigid practices. Since the fiscal year in the majority of school districts starts in July, practically all of the purchasing must be done during the two summer months so that the schools will be ready to operate in September. Textbooks, equipments and supplies—the orders come from all parts of the country in avalanche proportions and almost overwhelm the factories. All production schedules are pointed to these unnecessary peaks. Transportation companies are also forced to carry top loads to deliver

materials on time. This unessential "peaking" of the load is expensive to industry and consequently to the public. It would be far better for labor and for management if an even load could be maintained throughout the year by staggering purchases in such a way that they would be spread over twelve months instead of three.

Here is a situation that tends both to inefficiency in instruction and toward greater expense in the purchase of essential materials. The natural question is whether any remedies can be found to meet these conditions.

## *Organization Faults*

The first step is to study present systems of school organization to determine causes for this piling up. There are a goodly number. In the first place, the fiscal year and the school year do not always synchronize. Many school districts operate upon the traditional academic year of September through June, but they budget and keep books upon a fiscal year that agrees more closely with the calendar year than with the academic year. These districts are required to plan at least one year in advance of need. Again, as a further complicating factor, the tax and the fiscal years do not coincide in many instances. Under these circumstances, the only manner in which the new year can be financed is through the sale of tax anticipation warrants. This is not particularly good financial practice.

A second group of school districts have the same academic and fiscal years, but the tax year is not synchronized with the fiscal year. Unless a surplus account is carried, it is necessary for the district to borrow at least half of its anticipated income until the tax returns are made. The first reason for lack of fiscal flexibility is inadequate recognition of the close relationship between the tax, the fiscal and the academic years.

Educational accounting is still suffering heavily from the attempts to implant upon it all the practices of commercial accounting. Systems devised

for profit and loss in industry have been transferred by commercial accountants to public education, without much change. Where early attempts were made to develop the problem in terms of its specific needs, little more has been done except to traditionalize and formalize the early products. Many so-called modern methods of educational accounting have been built largely upon the old Case system, with few added changes and with little recognition for the originator. More forms have been added, but flexibility has been greatly decreased. Many of these practices are not only inadequate for accurate cost accounting, but are also so devised that they fail to serve their original facilitating purpose. They have become ends in themselves, fetishes for the "business" managers.

Detail in accounting technique is more essential in public than in private finance. We do not care particularly how Henry Ford keeps his books. Even if we did, the knowledge would serve no purpose for us. In the securing and expending of public revenue, however, it is essential that records be available from the beginning to the end of every transaction, from the inception of the needs to the final or constructive use of the supplies. The basic purpose is to protect the public interest. Incidentally, this practice also protects the responsible agent, which is a highly desirable outcome. The principle is an excellent one. It cannot be observed too thoroughly and too carefully. In general practice, however, it has been so conceived and used that, in the process of giving protection, it has slowed up procedure to such an extent that flexibility has departed and educational agents groan at the difficulties involved in securing services or supplies. In this case, the principle of public protection appears to be defeating its own purpose by red tape involvements.

#### *How Efficiency Is Affected*

Many of our tax laws and statutes regarding public expenditures were designed for an entirely different economy than that under which we are now operating. Many of these laws are archaic. They have no meaning to-day. Their effect is hampering and it is questionable whether they serve their original purpose of safeguarding and protecting. Whenever administrative practice is written into law instead of being left to executive action, it tends to complicate and to crystallize practice.

Type of organization also affects efficiency. Noninstructional or facilitating activities are separated from education and labeled "business," and where such activities are further removed

from their primary purpose by dual or multiple executive organization, the separation is more complete. Personnel under these organizations tends to be further and further removed from primary purpose and, through pressure or routine and because they are actually independent of educational control, the mechanics of the activity become a more important factor than the service.

It is difficult to change tax legislation. It takes a long time to overcome traditional forms of organization. Tax, fiscal and academic years will probably not be synchronized for a long time. The problem of securing more flexible supply service for the classroom and of assisting the industry to stabilize production and employment is an immediate need. In spite of the apparent difficulties in the way, there is a simple accounting means by which flexibility can be secured and which, in most instances, can be made to conform with existing statutes and practices.

#### *General Stores Procedure Explained*

Boards of education might legitimately use the device known as the general stores account to ensure flexibility in procedure. As a plan, it is not particularly new. It was in use in certain progressive centers as early as 1915. In certain other forms, it has long been employed as a flexible procedure upon a small scale. Despite its age and its value, relatively few public school accounting systems use or appear to understand the possibilities of the general stores procedure to ensure constant and steady flexibility in services other than personal.

In its accounting essentials, the general stores procedure is nothing more than a "revolving fund" which developed originally from a "petty" or "impressed" cash account.

The general stores procedure in the form described here is adapted to public school systems that operate a general purchasing and storage activity. It does not work so well in small systems unless it is modified.

Efficiently organized purchase procedures in public school organization should make possible: (1) purchasing in such quantities and qualities that instructional demands, as officially approved and carried in the budget, may be satisfied easily and completely at exactly the right time; (2) purchasing in quantities sufficiently large to secure the best shading on prices; (3) avoiding the seasonal peak in supply service and thus ensuring speedy delivery; (4) purchasing with cash to take advantage of trade discounts. These discounts sometimes actually pay the greater share of expense in operating the purchasing department. The variation in prices of certain supplies—such



as paper—by months is often large enough to effect large savings. The only real requirement in achieving this program is flexibility. Sufficient money must be immediately available to meet the obligations; it must be usable at the proper time and it must be relatively free from time-destroying activities, such as the typical traditional routine board of education methods of progressive approval.

The first step in the initial development of a general stores procedure is to determine the total amount of appropriations for supplies, textbooks and equipment. A sum not in excess of this total is then transferred from "Surplus" to the new account, "General Stores." Whenever the need arises, and in accordance with the policy of the board of education, purchases may be made for the ensuing year by purchasing not directly against the proposed or recently adopted budget, but for general stores, which, like the schools, is considered as a perpetually continuing activity. All supplies, textbooks and equipment approved for advance purchase should be charged against general stores. As these materials are received by the storekeeper, he charges the general stores account with the total invoice value of the units of materials. The general ledger account also carries the control charge against general stores.

As the needs of the specific schools, departments and offices are satisfied through requisition from this general stores supply, the storekeeper credits his account and charges the individual school or department with the units of materials, their purpose and their cost. In this way, the charge against the general stores account is diminished and the charge against the school is posted back to the appropriation ledger, in bulk with others, or separately, depending upon the size or system, and charged against the specific appropriation involved. The means of determining costs either by school, by course of study or by any desired combination is easily possible by controlling the method of charging out from general stores.

#### *Funds Are Available Any Time*

The general stores account was first established by withdrawals from surplus. The first purchases were made before the new budget became legally available. At the beginning of the fiscal year, the general stores contained supplies, textbooks and equipment, assuming all purchases had been completed, up to the limits of the new budget appropriations. As the materials are sent to the schools, the amount charged to general stores decreases and the amount of credits is correspondingly increased. It is, therefore, possible at any

time in the future for the board of education to transfer from the budget supply, textbook and equipment accounts, the actual encumbrances against such accounts as determined by postings in the appropriation ledger.

These transfers may be made monthly or semi-annually, depending upon what appears to be the most desirable practice. At no time should the amount of available cash plus the general stores inventory be greater than the total budget appropriations for nonpersonal current expense service. The easiest check is to allow only such transfers to general stores as have actually accrued as encumbrances against the budget appropriations.

It is obvious that this practice results in flexibility of purchase by making funds available at any time of the year. Since this is technically a surplus account, it can be operated under the permissive features of any school statutes unless there is a direct prohibitive clause in the mandatory enactments.

#### *Simplifying Purchasing Procedures*

The second factor of speed and freedom in the purchase of material so that economies may be effected through taking trade discounts lies in the possibilities of simplifying purchase procedures under the general stores procedure. The approved method consists of a definitely defined purchase procedure with respect to approved standards of quality and quantity. Since both these standards have been approved and allowed in the budget for the ensuing year, it is only necessary to secure authority to make the specific purchase. Since authority to purchase is legally provided in the board of education minutes, the bills may be paid after verification by the officially appointed executive and the payment reported back to the board, with the complete history of the transaction or transactions in tabulated form. If the board of education desires, the actual tabulation of bids may also be published in the minutes, although this is not essential if the routine procedure is so developed and operated that every transaction, from the initial development of the need to its final disposition, is completely recorded.

It is easily possible, by means of a logical and completely organized procedure, to maintain complete safeguards with respect to the expending of public monies, and yet secure speed, freedom and flexibility, so essential both to efficiency and to economy, without going through all of the time destroying routine repetitions of presentation and re-presentation to the board of education. A complete accounting and purchase procedure, permitting a complete audit, is more effective protection than the traditional plan of official lay approvals.



# New Commencements for Old

*Why should graduation exercises lag behind present day advances in education when they can help so notably in interpreting the school to the public?*

BY LYLE W. ASHBY, ASSISTANT DIRECTOR, DIVISION OF PUBLICATIONS, NATIONAL EDUCATION ASSOCIATION

THE present generation of adults has seen profound changes in the school. This is one of the reasons why there is to-day such a vital need for adequate interpretation.

In the past quarter century the schools have ceased training pupils merely for entrance requirements to a higher school and have begun to teach pupils how to live. They are not teaching books, but pupils. They are training the pupils in the fundamentals of human life—health, home membership, tools and techniques of learning, citizenship, vocation, leisure and ethical character.

School equipment has improved in unbelievable fashion both as to quantity and quality. Scientific methods have been established on the basis of painstaking research. Teachers are better trained and more adequately paid. School support has been more equitably distributed through new apportioning devices and special taxes. Education has become nearly universal in the lower grades with the privilege of continued free education, and courses at all levels are being fitted to the pupils, not pupils to the courses.

In sharp contrast to such tremendous gains in most activities, certain phases of the educational program have been relegated, through apathy and negligence, from the main current into the backwash. One of these is the commencement. The old type of graduation has been retained in a new age of schools and is now as obsolete as the curriculum of half a century ago. The following is a sample of the old commencement still far too common<sup>1</sup>:

Class march.

Invocation.

Overture, "The Girlie With the Baby Stare."  
(This was in 1904.)

Trombone solo, "I Think of You," by a member of the class.

Address, "The Dawn of a World's Peace,"  
by a prominent judge.

Awarding of diplomas.

What graduate is thrilled or helped or improved by such a program? What parent? What

alumnus? What undergraduate? What citizen? What taxpayer? What teacher? True, they all attend the commencement but they do so in most cases in spite of the program rather than because of its attractiveness. They are traditionally but not vitally interested.

## *Forty Years Ago—and To-day*

The evolution of a high school commencement is shown here. This is an actual situation.<sup>1</sup> The educational progress of this city is indicated by the number of graduates. The puzzle is to find any progress in the commencement program.

Forty Years Ago: High school commencement exercises were held in ——— Opera House. A profusion of flowers decorated the footlights, while the motto of the class formed an evergreen arch over the center of the stage. The full corps of eight teachers occupied the stage with the graduates.

Twenty Years Ago: At the commencement exercises of the ——— High School, twenty-seven graduates claimed their diplomas as their names were called by the president of the school board. The address of the evening was made by the Hon. ———, for many years ——— delegate in Congress. The theme of the young salutarian, ———, was "Aerial Navigation," in which he predicted that airships would become as popular as automobiles, if the cost could be reduced to a reasonable figure.

To-day: After four years of study, 407 young persons received their diplomas in the high school stadium, in the presence of several thousand relatives and friends. Dr. ———, president of the ——— Normal School, warned the young people against several dangers, lack of preparation, danger of overdevotion to scholarship at sacrifice of other members of the family, impatience and loss of idealism.

The old commencement may have fitted the old school. It does not fit the new school any more than a Latin grammar school of prerevolutionary vintage would fit into the educational school of a twentieth century city. Yet thousands of schools

<sup>1</sup> Jones, Gertrude, *Commencements*, Extra-Curricular Library Series, edited by Harold D. Meyer, A. S. Barnes Co., New York, 1929, p. 3.

<sup>2</sup> *Arizona Teacher*.

persist in following the old routine. For them the commencement season is merely the end of the year, an event for which the authorities hire a speaker to tell the class how to succeed, how to be good citizens or how to live honest and fruitful lives. Or the chosen orator may speak on some abstract subject having no definite connection with the occasion. If the school has not succeeded in inculcating these ideals by commencement time, it cannot hope to make them a reality by one lecture or address.

Commencement is logically the time for pupil activity. The program should show that the pupils have learned to deal with their own problems and with the problems of the community intelligently and effectively. No sensible person, of course, would wish to abolish completely the practice of securing commencement speakers. They have, and will continue to have an important place in commencements. The point is that they should not monopolize the event. When a speaker is secured his part of the program should be fitted into and harmonized with that of the pupils.

The movement for vitalized commencements then proposes to make the graduation program (1) original and attractive by freeing it of meaningless traditionalism, by replacing stereotyped elements with significant new materials and by suiting it to the special needs of each class and community; (2) a pupil and community activity by refusing to permit an imported speaker to monopolize the event, by enlisting the cooperation and interest of graduates in making it their program, by acquainting the public with the plans by means of a community publicity program, by soliciting the cooperation of civic clubs, churches, newspapers and parent-teacher organizations and by making the preparation for commencement an all-year activity, culminating during the commencement week; (3) serve a useful purpose by providing an opportunity for self-activity and growth for graduates, by interpreting the school, its contributions and its needs, by binding school, home and community together as no other agency can and by developing community plans and ideals.

#### *For Whom Are Commencements Held?*

A recent bulletin entitled "Interpreting the Public's Schools" issued by the North Carolina Education Association contains the following statement:

"Meetings of all kinds from commencement occasions for the whole system to the smallest parent-teacher group meeting are valuable forms of publicity. These have never been used as a

means of getting important and vital information to the parents. Commencement occasions are too often merely meetings in which some imported speaker, who knows nothing about the school system and conditions, is given an opportunity to talk about matters that have little bearing on the school life of a community."

Obviously commencements are not held for the purpose of interpreting the schools. They are held primarily for the graduates. They are times set aside (1) in recognition of the attainments of the class, (2) as a point of departure with a natural summing up of previous experience and (3) for the inspiration of the graduates. But commencements should affect other persons than the graduates. They should touch and influence the entire community. Effective interpretation is only one of the things the commencement can and should accomplish in addition to its primary objective.

#### *How May the Program Be Vitalized?*

Just what do schools do to vitalize their commencements? Perhaps the most satisfactory method of answering the question is to point out what schools have done. Suppose the class decides to center the program around school failures, their causes and how to reduce them. This necessitates the compilation of school records to determine the number of failures and interviews with teachers and parents to determine the causes. Another sample suggestion is for the class to point out how the school promotes health, worthy home membership and wise use of leisure.

As an example of the practical working out of such a program the Doylestown, Pa., high school graduation of 1927 is cited. The real purpose of the study made by this graduating class was twofold: first, to present to the community, gathered for the annual commencement and thus receptive, material in popular form on an important school problem; second, to continue the practice of this school in departing from the formal and stilted and uninteresting commencement essays and orations. The commencement program then consisted, in part, of talks by the seniors on these subjects:

Introduction (method of study).

Extent and nature of failures.

Causes of failures as given by teachers.

Causes of failures as stated by pupils.

Summary.

The subject of school failure is one of importance in every community. Serious waste of human material, teacher effort and school buildings and equipment should be a subject of careful study in all schools. The study made by the

Doylestown class was not only a splendid experience for the graduates but it was also valuable to the younger pupils, the teachers and the parents. It helped all concerned to understand better one of the problems of the school.

Another excellent suggestive program was that given by the 1929 graduating class of Cony High School, Augusta, Me. Any citizen attending this program understood more completely and satisfactorily the work of the Cony High School. Each part of the program was the work of from one to a dozen graduates:

#### *Program*

General Subject—A Demonstration of  
Some of the Newer Features of  
High School Work

March, Cony High School orchestra.

Music, "Andante Cantabile in G," for two violins.

Salutatory, "Diversity in Secondary Education."

Discussion and exhibition of high school drawing work.

A typical physics laboratory experiment.

Vocal solo, "I Know a Lovely Garden."

Physical education exercise (by twelve girls).

Dramatization of some of the work in the office training course.

Description of a manual training product.

Valedictory, "Effort, the Chief Factor in Success."

Initiation of national honor society.

Awarding of special prizes.

Presentation of diplomas.

Recital of the Athenian Oath.

Singing of the class song.

The 1929 graduating class of the Thomas A. Edison Junior High School, Los Angeles, staged a revue of as many departments of the school as could be handled. There was no outside speaker. More than 200 of the 350 graduates took part. Twelve hundred parents and guests sat almost spellbound as they saw the junior high school pass in review on the stage. There were no dull places; action continued without interruption.

Parents agreed that the program was far superior to the conventional commencement. Many comments similar to the following came to the office of the principal:

"I did not know that the children were being taught such a variety of good things here at school."

"That opened my eyes about the school. Now I know that modern schools are even better than the old kind."

"I feel as though I would like to be back in school once more."

One of the teachers of this school writes:

"Such a program capitalizes the high spirit of readiness which surrounds commencement. Instead of introducing the parents to an outsider, they were made acquainted with what their children could do on the stage and at the same time what the program of studies of the school is intended to be for all children. It gripped their hearts and won their approval for modern methods of education and for the local school. They were thrilled at the possibilities it revealed for better socialization and conservation of each individual pupil's powers. It seemed like a real educational treat to everybody. Perhaps it is not too much to say that commencement was worth, in educational products, many a day's hard teaching and learning."

#### *A Suggested Outline for a Program*

The potentialities of the vitalized commencement are a sound basis of prophecy for finer and happier school and community life. What vistas of better things might not be glimpsed by parents and citizens through a program similar to the following?

Early history of the community.

What we owe the pioneers.

Explanation of a community yardstick.

In what way does our community excel?

In what respects is our community not up to standard?

What advances can our community hope to make in the next decade?

How shall they be made?

What the school can contribute.

Pupils could develop such a program in excellent fashion and such a theme would receive the hearty cooperation of civic leaders.

Into it could be woven an element of prophecy, based on a study of what the community may become in the next ten or twenty years. If every school built some such vital program into the commencement season with its inherent community power, incalculably good results would accrue.

The *Journal of the National Education Association* for several years has been encouraging the movement for vitalized commencements, using the cardinal objectives of education as working tools, that is, basing the program each year upon one of the seven objectives. For 1930, worthy home membership is the theme. The following suggestions were made in the December, 1929, *Journal* in regard to general plans:

"Laying the plans: Plan a publicity campaign



through school and city papers to acquaint the community with the fact that the commencement program and the events leading up to it are to be built around the theme of worthy home membership. Have local ministers give at least one Sunday to a discussion of worthy home membership in relation to the church and school. Secure the cooperation of local civic clubs, having older pupils present the matter to them. Let the activities of the commencement season interpret to the patrons the specific contributions of the school to the homes of the community, such as the teaching of better habits, wiser use of leisure and increased vocational effectiveness. Cooperate with the local parent-teacher association. A committee of pupils working with a committee from the faculty

system, cleaner streets, better police protection, more efficient traffic control, parks and playfields. Conduct a cartoon contest. Use books on worthy home membership as commencement gifts. Conduct debates on the relative responsibilities of the home. Conduct an essay contest on the essentials of worthy home membership, on the happy home, on the cooperation of home and school or on other titles that pupils or teachers may suggest. Make a survey of pupil records and determine what factors in the home are responsible for the poor records. Does the pupil get started to school on time? Does he leave home in a happy frame of mind? Are his home conditions conducive to study? What correlation is there between failures and the homes

#### THE OLD AND THE NEW CONTRASTED

##### *The Old Commencement Program*

1. Was planned by school officials.
2. Consisted chiefly of an "address" by an imported speaker.
3. Centered about no special or helpful topic.
4. Was a precise repetition from year to year.
5. Was used chiefly as an opportunity for "preaching" to the graduates.
6. Secured the passive interest of the graduates and community.
7. Made no effort to interpret the school to its patrons.
8. Received no advance preparation.
9. Did not utilize the available resources.
10. Merely ended another school year.

##### *The New Commencement Program*

1. Is planned by the graduates.
2. Consists of a program by the graduates.
3. Centers about a topic of interest to pupils, parents and community.
4. Is original and attractive.
5. Is used as an opportunity for the graduates to train themselves for self activity.
6. Secures the active interest of the graduates and community.
7. Interprets vital school activities to citizens.
8. Receives preparation by large numbers of people throughout the entire year.
9. Utilizes the resources of the school, home and community.
10. Makes a large contribution to the graduates, the school and the community.

will be able to formulate the details of the plan and as far as possible pupils should feel that they are in charge of it."

Specific suggestions were made for the elementary school promotion, the junior high school advancement, the senior high school graduation and the graduate school. To show the type of suggestions made, some of those for the junior high school advancement are listed here:

"Junior high school advancement: Show how vocational courses—home economics, manual training, agriculture, and commercial courses—prepare the pupils to become more valuable home members. Indicate ways in which the school encourages thrift, safety and fire prevention. Have the class determine the chief home needs of the community—fire protection, water system, sewer

where 'No' is the answer to the questions? Let the pupils rate themselves privately as to their worthiness as home members. Cooperate with the parent-teacher association. Encourage school clubs to discuss the subject as part of their program whenever feasible. Use the school paper freely for the benefit of the parents as well as of the pupils."

Different schools use varying plans. The foregoing suggestions are merely illustrative. Schools may wish to use other themes and different devices. Some use senior speakers; others use pageants; still others use various combinations ranging from appreciations of local history to symposiums on constitutional government. But the details do not matter. The heartening thing is that schools are beginning to work on the prob-

lem. They are making the commencement an activity of, by and for the graduates rather than to the graduates by some outside agency—at best an attempt to cram inspiration.

Many schools are working on the problem. Notably successful among others are: Thomas A. Edison School, Los Angeles; Miller Park School, Omaha, Neb.; Cony High School, Augusta, Me.; the schools of Chanute, Kan., Tulsa, Okla., and Johnstown and Doylestown, Pa.

#### *Evaluating the Commencement Program*

Each year the graduation exercises should be evaluated and recorded so that progress may be made and measured. It has been suggested that a complete history of the graduation exercises be kept from year to year in the principal's office. This record should include<sup>1</sup>: a copy of the printed program; a full report of the planning and the carrying out of the graduation exercises; a transcript of the senior speeches or a copy of the pageant or play presented; evaluations of the program or comments upon it made by (a) three representative members of the graduating class, (b) three members of the board of education, (c) three members of the faculty, (d) three parents of seniors, (e) three citizens of the community, (f) three underclassmen, (g) three alumni, (h) the superintendent of schools, (i) the principal.

The following are specific questions to be considered in evaluating the commencement program:

1. Did the commencement program interest you? Why or why not?
2. Did the program ring true—that is, did it seem to be a genuine expression of the members of the graduating class?
3. Did the program state definitely a problem that awaits the solution of the graduates? Were methods of solution suggested?
4. From witnessing the program, what ideals, aims or objectives of the school were apparent?
5. What do you consider the main idea that the builders of the program were striving to present? Did they succeed in their effort?
6. In your opinion was the program beautiful? dignified? impressive? democratic?
7. What suggestions have you for improvement in the nature of the program?
8. Can you suggest improvement in the administering of the details of the program?

The commencement should make progressive improvement each year. The main thing is for school officials to be openminded and alert to the opportunities of the commencement season.

## Arguments for and Against Radio in the Schools

Education by radio among children in the schoolroom has faults as well as virtues, according to findings of the advisory committee on education by radio, appointed by the secretary of the interior, Ray Lyman Wilbur.

The favorable and unfavorable opinions of the use of the radio in the schoolroom as summarized in the findings are as follows:

"Among those in opposition is the view that broadcasting to schools constitutes an additional sales pressure put on school officials; that it is a dangerous vehicle of commercial propaganda; that it is both expensive and experimental; that it admits jazz and cheap entertainment to the schoolroom; that it subordinates teaching to dial twisting; that it disrupts, interrupts and overcrowds the schedule; that it encourages teacher laziness; that good programs are not available; that available programs are not properly correlated with the curriculum; that there is insufficient advance information on programs; that radio is of no more advantage than a phonograph record, since the teacher must supply instruction before and after; that too many teachers are incompetent to select radio programs wisely and use them skillfully; that it threatens to bring in more mass education.

#### *Radio Enriches the Curriculum*

"Among the arguments advanced in favor of the use of radio in the schoolroom is the theory that it enriches the curriculum; that it vitalizes instruction; that it adds variety; that it stimulates more attentive listening; that it fires the imagination; that it awakens intelligent curiosity; that it stirs ambition; that it broadens horizons; that it increases appreciation of the subjects studied; that it wholesomely stirs emotions; that it supplies personality and authenticity not felt in textbooks; that it results in increased voluntary research and study; that its demonstration lessons bring the teacher new ideas, new lesson plans, new methods and new exercises; that it relieves the strain of continual direction of class work; that it enables the teacher to study her class and observe individual differences more effectively than is possible when she is doing the actual teaching; that it awakens adults to a new understanding and appreciation of school work; that most of the objections to it are like all objections to new methods—inspired by inertia or uncertainty—and will vanish as the art is learned; that opponents are chiefly among those who have not given it a fair trial."

<sup>1</sup> Jones, Gertrude, *Commencement*, Extra-Curricular Library Series, edited by Harold D. Meyer, A. S. Barnes and Co., New York, 1929, p. 56.



# Is Military Training a Substitute for Physical Education?

*Leading military authorities maintain that military training begins best when the boy is eighteen years old and after he has had the benefit of an efficient physical education program*

MILITARY training may be a part of the physical education program of high schools and colleges in this country but it can never satisfactorily be substituted for physical education. Military training and physical education differ too widely in their aims and objectives. One is restricted in its appeal, the other is universal.

Thus does Dr. James E. Rogers, director, National Physical Education Service, and president, department of school health and physical education, National Education Association, approach a subject of deep interest to school administrators.

## *Physical Training Should Come First*

Military training begins best when the boy is eighteen years old according to the opinions of leading military authorities, Dr. Rogers says, at which age he will have undergone a physical training that will more acceptably fit him for the military life. Military leaders agree that it is better to have in the early, growing, adolescent years of the high-school boy a complete, efficient physical education program that will fit him later for any military training. Physical fitness is the first essential of any soldier. This is proved by the fact that during the war excitement, when military training was in vogue, statesmen of the nation held that the primary program should be one of physical education.

Physical education is the best kind of preparation for military training, Dr. Rogers further contends, holding that it is adaptable to the physiological and mental age of boys in the senior high school.

In any discussion of the relative merits of military training and physical education, a statement made by Newton D. Baker, former secretary of war, during the period of mobilization for the World War should be apropos. "One of the principal functions of the states hereafter," Secretary Baker said, "must be to rescue young men from the situation shown during the recent mobilization when one-third of the drafted men were found to be physically undeveloped or defective.

We must realize that physical education is as necessary to the development of our youths as is mental training."

The late Maj. Gen. Leonard Wood, who gave a long life to the military service of his country, had this to say concerning attention to the physical development of boys in their formative years: "The large majority of these boys who came to us could have been made fit for military service if they had had any kind of supervision early in life. There is nothing mysterious about military training. It is very simple and very quickly accomplished with the private soldier."

"The first step in the improvement of the American schools is the introduction of universal physical education for all boys and girls," the late Dr. Charles W. Eliot, president emeritus of Harvard University, said in connection with the agitation for military training in the high schools during the war.

## *Military Training Less Popular Than Formerly*

Since the war the movement has been away from military training and toward physical education programs in the high schools, since physical education is peculiarly adapted to the needs of high-school adolescents, Dr. Rogers continues. Leading educators have expressed themselves as opposed to the substitution of military training for physical education. Not that there is any objection to military training as such. It is only that it is an inadequate substitute for a physical education program with its variety and more universal appeal. Poise, obedience and attention to duty, the three qualities that military training seeks to inculcate in the youth, can all be secured through physical training, plus all those commendable characteristics that are a result of careful health habits and physical education.

Physical education to-day is a part of the educational program. Thirty-five states have physical education laws, thirty have state programs and nineteen have state directors and departments. But no state has a law making military training compulsory.



## The NATION'S SCHOOLS

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## Editorials

### How Can a Superintendent Best Spend His Vacation?

**T**HIRTY-TWO superintendents of schools, picked at random, were asked: "How can a superintendent best spend his vacation?"

The responses indicate that most superintendents do not have a vacation. All of the superintendents addressed receive their salaries in twelve monthly installments. This implies that boards of education expect superintendents to be on duty or at least within reach throughout the year, even in cities in which the schools are not in session from the middle of June to the first Tuesday after Labor Day in September. The superintendent is an all-year employee.

Taking the thirty-two superintendents as a sample, we find that one in every ten superintendents passes the summer vacation in professional study for an advanced degree. These superintendents are at the beginning of their career and they think that promotion will be more rapid and secure if they have at least a master's degree, or better still a doctor's degree. Seven out of ten superintendents remain in their respective communities superintending buildings, remodeling programs or working out revised curricula for the schools. This group is accessible practically all the year to patrons of the schools who have problems relating to their children.

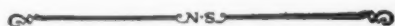
Choose a hundred superintendents at random and ask each one whether or not he has two and one-half months' complete vacation from school duties, and the chances are that not one will be found who enjoys so long a period of complete relief from the routine of a superintendent's work. Most of these superintendents, however, have short breaks during which they attend educational meetings or go off on brief automobile trips or excursions. One of the thirty-two correspondents conducts courses in a teachers' college summer session and so is refreshed. He returns to his superintendent's duties in August and is able to get everything ready for the opening of the schools early in September.

How should a superintendent spend his time during the summer vacation? No one has apparently ever made any investigation of the superintendent's ebb and flow of energy in the prosecu-

tion of his work. Studies have been made, however, on mental fatigue which at least throw light on the question, "Does a superintendent need to get completely away from his professional work for two and one-half months each summer?" So long a break as this is not necessary in order to maintain energies at a high level. It has been shown in the case of school children that comparatively frequent short breaks of three or four days or possibly a week give greater relief from nervous strain and tension than does one long break of ten weeks or thereabouts. There is an exception in the case of pupils who can spend this longer vacation in hikes or in traveling.

The same principle of maintaining physical health and mental vigor undoubtedly is applicable to the superintendent. A ten weeks' continuous vacation will not prove so valuable in the avoidance of fatigue as rather frequent vacations of a few days at a time. If there could be at least monthly periods throughout the year when the superintendent would not have to go to his office, would not have to confer with any ambitious or faultfinding parent, would not have to see any member of the board of education or advise any teachers, when he could follow his own desires completely without fear of interruption or condemnation either from his own conscience or from those he serves, he could stave off fatigue more effectively than by following any other program.

If, in addition to these frequent breaks in professional routine, he could have perhaps one full month in the summer for complete release from accustomed duties when he could follow any plans of his own making, he would have a program well adapted to conserve energy and to avoid the accumulation of nervous strain and tension.



## The Modern Encyclopedia—An Ally of the Teacher and the School

**M**EMBERS of the older generation can remember when an encyclopedia was a dry dull inexhaustible compendium of knowledge. In an earlier day anyone who resorted to an encyclopedia frequently was spoken of as a bookish "grind."

But the younger generation is more fortunate. "Encyclopedia" is not now a forbidding term. It is inviting rather than repelling. The world's knowledge has been made interesting and attractive. Young and old now find encyclopedia knowledge as engrossing and as understandable as a novel or a nature study. Such a statement was recently made by a college president whose son is a pupil in a high school and who has been

spending his leisure in reading the articles and looking at the pictures in the "World Book Encyclopedia," which has just come from the press.

Twenty years ago the publishers of this book determined to make an encyclopedia that would present the world's knowledge in a more attractive form than it had been presented before. Professor M. V. O'Shea of the University of Wisconsin, editor-in-chief of *The NATION'S SCHOOLS*, was commissioned to plan for the new encyclopedia, to secure a staff of specialists and cooperate with them in producing it. It was determined to select from the world's knowledge that which would be of interest to those living in a modern world, to make this knowledge absolutely accurate, to present it in a story form and to supplement the text with an abundance of pictures and other visual aids to understanding and enjoyment.

In 1917 the "World Book" appeared and set a new standard in the making of encyclopedias. Since then other encyclopedias based on the same general plan have appeared and have attracted widespread and favorable attention, such as Compton's "Pictured Encyclopedia," the "Encyclopedia Britannica" and the revised "Book of Knowledge."

Since the original "World Book" appeared the whole world has been revolutionized. New developments have taken place in every field. The World War produced a new social order. We are living at a much faster pace than we did even a decade ago. The editors and publishers of the "World Book" have been alert to the new order of things and they set to work a few years ago to produce a new, enlarged and improved encyclopedia. Professor O'Shea secured a staff of 250 outstanding authorities in every department of human knowledge and activity. Gordon St. Clair was commissioned to secure a staff of artists for the purpose of illustrating in halftones, in symbolic pictures and in diagrammatic designs all knowledge that could be made more interesting and intelligible in this way. The new book, just published, contains upwards of 10,000 of these halftone illustrations.

Additions that have been made in the last two decades to our knowledge in every field have required the expansion of the new encyclopedia to twelve large volumes, with an additional volume as a reader's guide in which all the contents of the encyclopedia are grouped under proper headings with complete cross references, so that a reader can without loss of time or energy immediately find everything on any topic. The new book is arranged like a dictionary. Every article is in alphabetical order so that the reader does not first have to go to an index and then hunt up



an article in the text. There is a new series of articles on the contributions of science to human well-being under all conditions; a series of articles on the nature and needs of childhood and youth; many articles on modern education; a vast number of articles that give the reader an understanding of the world in which he lives, physical and social, and that enable him to take advantage of the contributions of science to promote his well-being—intellectual, physical, social, ethical and moral.

The format of the book was determined after experiments had been made in order to find out what type could be read most easily and with least fatigue, and what paper would make the type and illustrations most clear and attractive without eye strain. Every source of knowledge and skill was drawn upon to produce a work that would be authoritative, interesting, attractive to the eye, and of practical service to young and old alike. The "World Book" thus sets a new standard in making knowledge available in an accurate, attractive and intelligible form for the school, the home and the office. J. A. M.



## Recruiting the Teaching Staff

**B**Y the time this editorial is published, superintendents and principals of schools will be eagerly casting about for teachers to replace those who have abandoned the teaching profession for one reason or another.

At such a time anxiety and considerable discontent and even dissatisfaction are always present. Superintendents feel the pressure from patrons and from the boards of education to replenish the teaching staff with experts who will be successful immediately. At the same time, they are cautioned against wasting the taxpayers' money in paying too generous salaries to new teachers.

There must always be some disappointment in recruiting the teaching staff so long as the teaching profession is a peripatetic one. Candidates for teaching positions who do not expect to remain in the profession more than three or four years will not make adequate preparation for it.

Because the teaching profession is as yet an unstable one, there are all sorts of makeshifts for the training of teachers. There are flimsy courses of training in the high schools. There are county training schools that give most of their attention to supplementing the defective academic qualifications of their students. There are one-year courses and two-year courses, three-year courses and four-year courses in teachers

colleges, with the briefer courses much more populous than the longer ones. There are private schools for the training of teachers and there are pedagogical courses and departments, and schools and colleges of education in the universities. Think of the situation that would exist in medicine, in law or in engineering if there were so many routes, some of them quite devious, by which novices could reach their goal—a professional certificate.

Add to this confusing and unsatisfactory situation the fact that some persons do not believe in the value of special training for teaching, and it can be appreciated that the business of training teachers is in an embryonic state. The university groups, especially, have looked with suspicion upon professional training. A change, however, is taking place in our country. At the last meeting of the American Association of Colleges, resolutions were passed as follows:

"That no graduate school admit to candidacy for the doctorate any student intending to engage in college teaching who has not a wide background of intellectual interest and experience.

"That efforts be made to give to each graduate student intending to engage in college teaching an adequate training in methods of teaching as applied to the department of knowledge in which the student is working.

"That each graduate school should offer to students intending to engage in college teaching an adequate and varied optional course in the instructional and administrative problems of the American college.

"That for those graduate students who are intending to engage in college teaching there be an optional quantitative relaxation of the research requirement.

"That heads of departments in graduate schools acquaint themselves with all readily ascertainable evidence as to the teaching ability of their graduate students. . . ."

Those responsible for recruiting the teaching staff can help to stabilize the teaching profession and improve the training of teachers if they will not give way to the constant pressure to accept teachers or instructors temporarily on emergency certificates, pending their learning a few points about the profession they are entering. Of course the friends of aspiring candidates may make life unpleasant for the superintendent or principal until he employs an inadequately trained teacher or college instructor, but every time such a person is given a position, the stabilizing of the teaching profession is retarded and the movement to put the training of teachers upon a footing with training for other professions is blocked.



# Practical School Administration: Printed Programs as a Medium of Effective Publicity

BY PHILIP LOVEJOY, ASSISTANT SUPERINTENDENT OF SCHOOLS, HAMTRAMCK, MICH.

HAVING a great liking for school musical productions, I journeyed recently to a near-by city to see a performance of "The Gypsy Rover," put on by the high school pupils. I received a fairly good seat and was shown to it by a polite and courteous usher. Since I had arrived about ten minutes early, to while away the time I busied myself with a careful inspection of the printed program for the evening's event.

The program was a blue bond affair half folded from a regular letter size piece of paper. It had been printed on a multigraph. The heading, "The Gypsy Rover," was in twelve-point capitals printed in a gray ink, that offered practically no contrast to the blue background. The rest of the information on the cover contained the words, "A musical comedy given by the pupils of—— High School, Jones Theater," and the date.

Inside the front cover in typewriter type was the story of the play and on the third page was a list of the musical numbers. The fourth page was blank. In vain I searched for the cast of characters. In vain I searched for some information as to the purpose of the play or to what use the receipts would be put. In vain I searched for information concerning the public schools of that city. I whiled away the remaining twenty minutes (because the play did not begin on time) by twirling my thumbs.

## *Lost Among the Advertisements*

More recently I went to another near-by city and was handed a single sheet program for the senior play, "Peg o' My Heart." The paper was a cheap mimeograph grade about 4½ by 8½ inches. It, too, was printed on the multigraph. The name of the play was printed in wedding text, all in capital letters. The printing was not clear and no information was given concerning the school. A third play I attended was the "Charm School," given by still another high school. The program handed me there was a young billboard. It was with difficulty that I found information about the play. There were four advertisements on the front cover, five on the second page and four on the third page. Be-

tween the two pages in the "gutter" was an advertisement of "Blank Brothers—Home Furnishers." The back page had five more advertisements on it. In small type on the three pages I did manage to find the cast of characters and a story of the play but no word about the school itself or its accomplishments.

## *When Pupils Cooperate*

Contrasted with these three programs was the one handed to me in a medium sized city in Michigan for the musical comedy, "Nannette." This program was an eight-page artistic affair with a tissue frontispiece and a special gray art cover printed in two colors to give a three-color effect. The cover picture was of a French cottage, beautifully designed. Below this was the word, "Nannette." The program itself was in two colors—black with orange embellishments. There was a title page. Overleaf I read with great delight an entire page devoted to the interesting topic, "Behind the Footlights."

The management of the school took me into its confidence and told how the entire production was a cooperative project. I was given the names of the teachers who assisted in the various departments and was shown exactly how the school work was correlated to make this play a cooperative success. Even the boys of the stage crew were mentioned. On page 3 there appeared the story of Nannette and at the bottom of the page was an item devoted to courtesy. The center spread contained the cast of characters—all the choruses and the musical numbers including information about an original prologue. Page 5 continued the musical numbers and gave the names of members of the orchestra. Page six mentioned the pupil staff and the faculty staff as well as the names of the ushers, who were also pupils. The program was a work of art.

The program had prepared me for the exceptionally enjoyable evening that I spent. Even when I entered the front door of the high school the corridor had been turned into a French village to put me in the mood of the play. Nothing elaborate had been built. I still have the program of that event. It was worth keeping. There was

no advertising. It was a thing of rare beauty designed in the art department and printed in the school shop.

I hear criticisms: "Plays are given to make money. Programs offer legitimate space for local merchant advertising. Much money may be made in this manner." Plays should be given as projects of the school without an admission fee. They should not be given to make money. At the present time, however, they are given in most schools for money raising purposes. So let us accept this statement and analyze the other.

Does a program full of advertising raise the most money for the school? Does a merchant want to attend a play and read about Jones' beans and Henry's sausage? His evening is not then removed from the din and drudge of the daily tasks. He attends for amusement and also to see what his children can do. Furthermore, it is probably the one and only time he gets inside the school building in the course of the year. Think then what impression must be made on him.

The play will show the results of expert coaching in both music and drama. If the scenery is exquisite he will have a better idea of the work of the art department and of the manual training department. If the dancing is superior he will view with appreciation the work of the physical education department. If the management has been without a hitch he will know that the commercial department can train pupils in the arts of modern business. If the program is artistic he will know that his money has not been wasted in the establishment of a school printing plant. Furthermore, if the program tells him something about the school system and the whys and wherefores of its mechanism he will be more convinced than ever of its usefulness.

#### *Why Advertisements Should Be Eliminated*

Some one of the readers of this article will immediately say, "Yes, but such a program as you suggest will cost lots of money. We need to raise money and, hence, expenses must be kept at a minimum." My answer would be that the first way to raise money would be to eliminate advertising from the program. This event and this program offer major opportunities for the school system to display its wares. No citizen wants to go to a school play and read advertisements of local merchants. He wants to know about the school.

It may also be said, "If the program has no advertising, it will cost more to print." That is true. Programs for "Nannette" probably cost five cents each printed in the school print shop.

I found out afterwards that more than 3,000 of them had been printed. That was at a cost of \$150. Think of how much money would have been saved had a single sheet been given out at say a cost of \$30. The answer again must come from the figures.

#### *What Specific Figures Show*

In that particular school, which was not in a rapidly growing community, it was the habit to give a cooperative school musicale each year. There were excellent corridor effects, ushers in costumes in keeping with the period of the play, beautiful scenery, excellent costuming in the play and attractive programs. The first year in a new building that particular school presented "Miss Cherry Blossom" to an audience of 1,900 and made about \$1,200 on the production in two nights. The next year "Hulda of Holland" was presented; 2,407 persons attended and approximately \$1,600 was made. The following year "Nannette" was given; 2,936 people attended during the three nights. The cash profit was nearly \$2,000. Tickets sold at \$1, 75c and 50c.

What I am trying to show is that parents and the general public will come to similar productions in increasing numbers and will, if necessary, gladly pay to see them. It is then up to the school to present its best front. The program is one of the methods. Let us have it as attractive as possible. If it is attractive it will be taken home. The test of a school program is the number of copies that may be found on the floor after the event. In the case of "Nannette" program less than 10 per cent were on the floor. In other words, nearly 2,700 were carried home. The second thing is that if it is carried home it may be looked at again. If information concerning the school is presented attractively, it will be of tremendous value in public school relations. The school will have an opportunity to have its patrons read facts about the system and its philosophy of education.

If such methods are used along with others, special campaigns for bond issues will be useless since the public will have been constantly informed as to the progress of the schools.

Not for a single minute am I suggesting that the only method of keeping the citizens informed is by means of play and commencement programs but I am suggesting that here is a tremendous opportunity to present facts concerning the schools. E. C. Hartwell, Buffalo, N. Y., has done this thing remarkably well in his commencement programs. Here is the great event of the year. The usual program tells about the exercises and gives the names of the graduates. Often people



arrive early. They want something to do. The Buffalo program is chock-full of facts about the schools. For instance, in one of the Buffalo programs we find the following statements among others:

"The pupils of School 53 have shown civic pride and a spirit of helpfulness this year in these ways: (1) they have kept the desks, the rooms, the building and grounds free from papers and rubbish; (2) they have assisted the engineer with his daily cleaning when help was scarce; (3) they have sold tickets and have made and paid for their own pageant costumes; (4) the boys have acted as a safety squad at the corners of block; (5) the boys have made and installed a bulletin board in each room and in each corridor; (6) they have acted as messengers to the bank and to the superintendent's office; (7) they have tried to be good citizens by being prompt, clean, helpful, courteous and obedient; (8) our entire building has been redecorated inside and out and much needed repairs have been made on the roof."

The school program is a tremendously effective medium in the field of public school relations. It has been overlooked in most schools. It is relatively inexpensive. More use should be made of it.

#### *Informing the Public About the Schools*

If the entire musicale or play is to be a cooperative project created in the different departments of the school then the program itself should be likewise created. The art department will design the cover and embellishments. The printing department will make the layout and do the actual typography and binding. The material will be written in one of the school departments. Of course, that which is directly copied from the musical score will be easy. There remains, however, the important part about which we have been talking—the "Notice to Patrons" concerning the school system itself.

It seems that the most logical place for this work to center would be the social science class. This department is constantly studying facts and figures about various social agencies. Why should it not use its own school as a work shop? This group could collect these figures from the school executive, study them carefully and write them in simple language for the program after they had been subjected to a complete class discussion. The school, therefore, would be accomplishing two worth while objectives by having the class do this important work.

The modern school executive will use every legitimate means to inform his public as to the status of the schools. The classroom must have

facts. Those of his own school will serve as a beginning. The pupils will naturally discuss these figures at home. When these facts are written in a simple manner by the pupils they are more likely to be understood. So, all in all, the school has a complete pupil project when it presents to the public a playlet and the program that goes with it.

A future article will present a technique for keeping a record of those who attended these school functions. Such a record becomes the live list of active supporters of all school events.

### Schools Share in the Conrad Hubert Trust Fund

Schools to benefit by the \$6,000,000 Conrad Hubert trust fund, which was administered by Calvin Coolidge, Alfred E. Smith and Julius Rosenwald, together with the gifts they were awarded, include: New York University, New York City, \$250,000; University of Chicago, \$250,000; Howard University, Washington, D. C., \$200,000; William and Mary College, Williamsburg, Va., \$50,000; the Catholic University of America, \$50,000 and the University of Virginia, \$50,000. Schools sharing in the residuary estate include the Kent School, Kent, Conn., Clarke School for the Deaf, Northampton, Mass., Smith College, Northampton, Mass., Johns Hopkins University, Baltimore, and Rollins College, Winter Haven, Fla.

The Boy Scouts of America was awarded \$500,000, the Girl Scouts, Inc., \$500,000, and the Children's Aid Society, New York City, \$200,000.

Nineteen other organizations will share in the fund.

### Connecticut Rules on the Capacity of School Busses

The following ruling of the Connecticut commissioner of motor vehicles concerns the capacity rating for busses or trucks operated by city, town or borough, or under contract with city, town or borough for the transportation of school children. This ruling supersedes all previous rulings, either verbal or written.

The capacity for a bus or a truck while it is engaged in the transportation of school children will be based on an allowance of one hundred pounds per child carried.

The seating capacity for a bus or a truck while it is engaged in the transportation of school children will be figured on an allowance of fourteen inches per child (face of seat).



# *Your Everyday Problems:* Adjusting the Curriculum to the Needs of Superior Pupils\*

BY JOHN GUY FOWLKES, PROFESSOR OF EDUCATION, UNIVERSITY OF WISCONSIN

AS THE end of another school year draws near, many things come to the attention of the school administrator that demand thoughtful consideration. One matter that always arises is the best way of providing for the superior children.

The existence of superior persons is recognized, and always has been, so far as has been ascertained, among all peoples. In barbaric society, historians found the noble and royal castes developed as a means of distinguishing the best of the offspring. Many centuries ago, words embodying the concept of mental superiority such as "genius" and "talent" appeared.

Despite the recognition of the presence of superior beings in society, however, the specific identification of such persons has been made only during recent years. As a matter of fact, the first instruments for measuring mental capacities that are in any way reliable are those produced by Binet and Simon at the beginning of the twentieth century. Since that time dozens of mental tests have been developed so that now the measurement of intelligence is an integral part of the program of any progressive school. Cattell, Whipple, Pintner, Terman, Hollingsworth, Baldwin, Irwin, Marks and many others have paid particular attention to the superior child.

## *How the Groups Are Divided?*

Before the perfection of mental tests as available to-day, the concept of superior intelligence was vague and ill-defined. The psychologist, therefore, has practically formulated his own definition, and is considering the upper 20 or 25 per cent of individuals tested by means of intelligence tests as superior. This upper group is then divided into two or three groups, such as "superior," "very superior" or "genius," and the percentage of individuals in these groups becomes progressively smaller in the upper levels. Terman in 1916 suggested the following classification of children, on the basis of I. Q.

Genius or near genius.....above 140  
Very superior .....120—140

Superior .....110—120  
Average ..... 90—110  
Dull normal ..... 80— 90  
Dull ..... 70— 80  
Feeble-minded .....below 70

Superior intelligence, as commonly used in schools, therefore, implies the possession of a certain amount of intelligence, as shown by intelligence tests. It does not imply the possession of any desirable traits or of any specific ability to be successful in the world at large as an adult.

## *Providing for Superior Children*

Many suggestions and schemes have been presented for providing for these superior children in school. One of the means that was tried early was that of allowing the superior children to skip certain units of work but this was soon found to be unsatisfactory. Another plan that was tried allowed those able to do so to complete one and one-half or two years of regular school work during one school year. But as most adults have learned, human beings need other things in addition to facts to enable them to fit into the modern social order, and this method brought boys and girls through colleges and universities before they were mature enough to assume their places in society. In light of these and other similar experiments, it is generally conceded that superior children should have as much time in school for ripening as other children. But at the same time, it is fully realized that the offering for superior children in school must be broader and richer than the usual curriculum.

After the acceptance of such a policy, however, many questions arise. Some of the most important elements that appear for consideration are as follows: Shall superior children remain in classes with children below their level of abilities? What should be the nature of the enrichment that is to be made? Shall superior children be encouraged to learn more facts or to attempt creative work?

Many interesting reports are being issued concerning the attempts in Russia and Mexico to stimulate children and adults alike to engage in creative work. The following discussion is an

\*Credit is due to Lucile Hays, a graduate student at the University of Wisconsin, on whose work this discussion is based.



# MORE

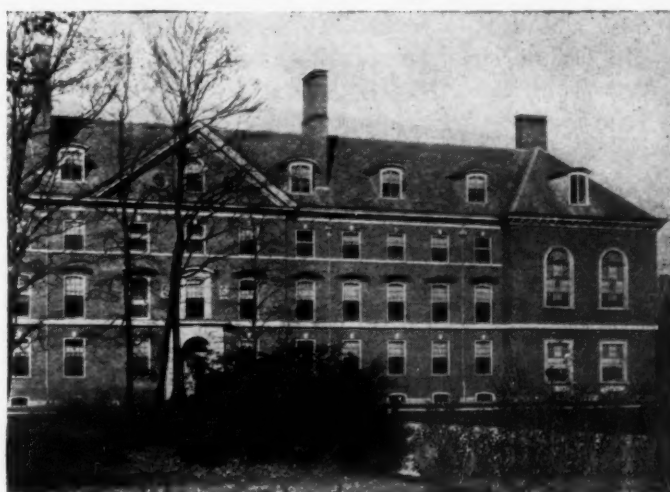
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# SEALEX LINOLEUM

account of an attempt made in the Dudgeon Elementary School, Madison, Wis., to enrich the curriculum of superior children in Grades 4, 5 and 6 during the school year 1928-29. The report is offered not as a final word, but as a suggestion as to what can be done with superior children.

In the Fall of 1928, a special class for superior children was organized with pupils from the fourth, fifth and sixth grades. The purpose of the class was to give pupils of high I.Q. an opportunity to do creative and original work, and to follow the subject in which they showed the greatest interest. Individuals for this group were selected on the basis of the National Intelligence Group Tests, the Stanford-Binet Individual Tests and on teacher judgments. The group met and worked on individual problems for one hour each day, five days a week. It was composed of ten pupils, six girls and four boys with I. Q.'s ranging from 113 to 138. At all other times they remained in their regular class rooms.

Excursions were made to various places of interest. Special opportunity was given this group to hear some of the Walter Damrosch school programs over the radio, as well as to hear President Hoover's inauguration speech.

#### *Class Interests and Activities*

Some of the interests and activities evidenced in the class were as follows: designing, for block printing; designing, for book covers; writing of original poems; writing of original plays; writing of autobiographies; designing and making of purses and scarfs; block printing; carving in relief; designing of costumes suitable for dances and plays; writing impressions of Walter Damrosch concerts; making of books; making of book covers; originating dances and games; extensive reading for information, including use of encyclopedias, and other reference books; free-hand drawing and water coloring; lettering; planning of stage settings. Detailed case histories were written of each child in this special class and each child kept a record of what he had accomplished. It is evident from this experiment that the superior child can capitalize on his abilities and at the same time mingle with other boys and girls. As previously stated, this discussion is indicative, rather than definitive. Other schools, however, might well try the plan used in the Dudgeon School.

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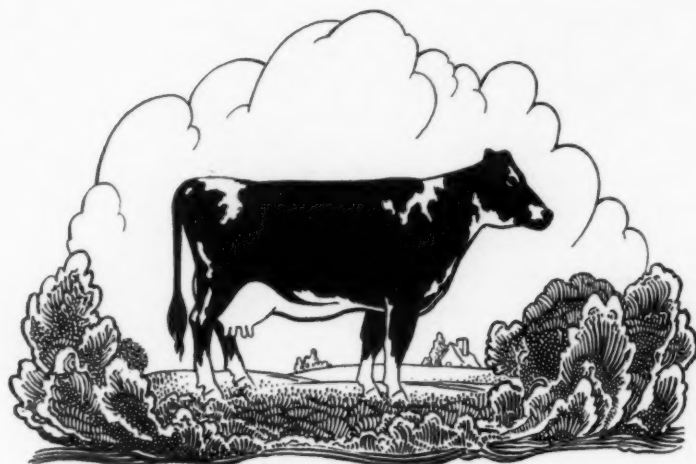
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#### *Localizing the Curriculum<sup>1</sup>*

During the last decade, much attention has been given to curriculum construction in local school systems. Two of the major issues that have dominated curriculum construction during recent years have been the socialization of the curriculum and the correlation of the curriculum. Few persons would question the desirability of relating all offerings of a school with life and few would question the desirability of recognizing and emphasizing the high degree of connection between the various units of the curriculum.

<sup>1</sup> Acknowledgment is made to E. L. Giroux, supervising principal, Black River Falls, Wis., under whose direction the activity program presented here is being used.





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RACINE, WISCONSIN

But it is possible to socialize and correlate a curriculum, and yet neglect one important element, namely, the localization of the curriculum.

To be sure, a properly organized program of activities includes the localization of the curriculum, but it frequently happens that a definite activity program has not been developed. The following list of activities is one that has been used in the schools at Black River Falls, Wis., during the past year, as a suggested guide to the elementary school teachers in the formulation of an activity program. The blank shows the form of report made by each teacher each week on the development of the activity program. Much interest and profit seem to have resulted from the

FORM TO BE USED BY EACH TEACHER IN  
REPORTING ACTIVITY PROGRAM

Date .....Grade.....Subject.....  
Activity Classification .....  
Activity .....  
Originally introduced by teacher.....  
By pupil .....Origin.....  
Specific Objectives:

Activities touched upon:

Procedure followed:

Time spent on activity:

Quality of interest displayed by group:

Results from activity:

Teacher

project and certainly the children see the connection between the school and the community much more vividly than before.

1. Child activities: playing; working and helping; working and earning; saving; cooperation in school or grade activities; sharing with others.

2. Family activities: trips; attending amusement places; other activities.

3. Local business activities: stores; box factory; creamery; newspaper; garages and oil stations; telephone; lumber; tobacco factory; miscellaneous.

4. Local government activities: city government; lighting—power house, dam; water; pro-

tection—police, health; streets and parks; post office; county government; miscellaneous.

5. Civic activities: parks; swimming pool; fairs.

6. Educational and religious activities: schools; churches.

7. Transportation activities: railroad; bus; aviation.

8. Out-of-door activities: tennis; golf; camping; hunting; fishing.

## Making the High School Library More Useful

Suggestions for making the high school library more useful are made by J. E. Edgerton and T. E. Osborn, high school supervisors, in the *Kansas Teacher*. These suggestions include the following:

1. Use encyclopedias and reference books: one modern encyclopedia for every fifty pupils.

2. Collateral books in English, history and biography; fiction; periodicals; current event studies and daily newspapers.

3. The library must be well managed and practically used.

4. The library must be in study hall or some other convenient place.

5. Plan to interest pupils in the use of library books and library privileges.

6. The ratio between the number of books in the library and the number of pupils using them—at least ten to one.

7. The order in the high school library should be equal to that maintained in public libraries.

8. All libraries must be card indexed and catalogued.

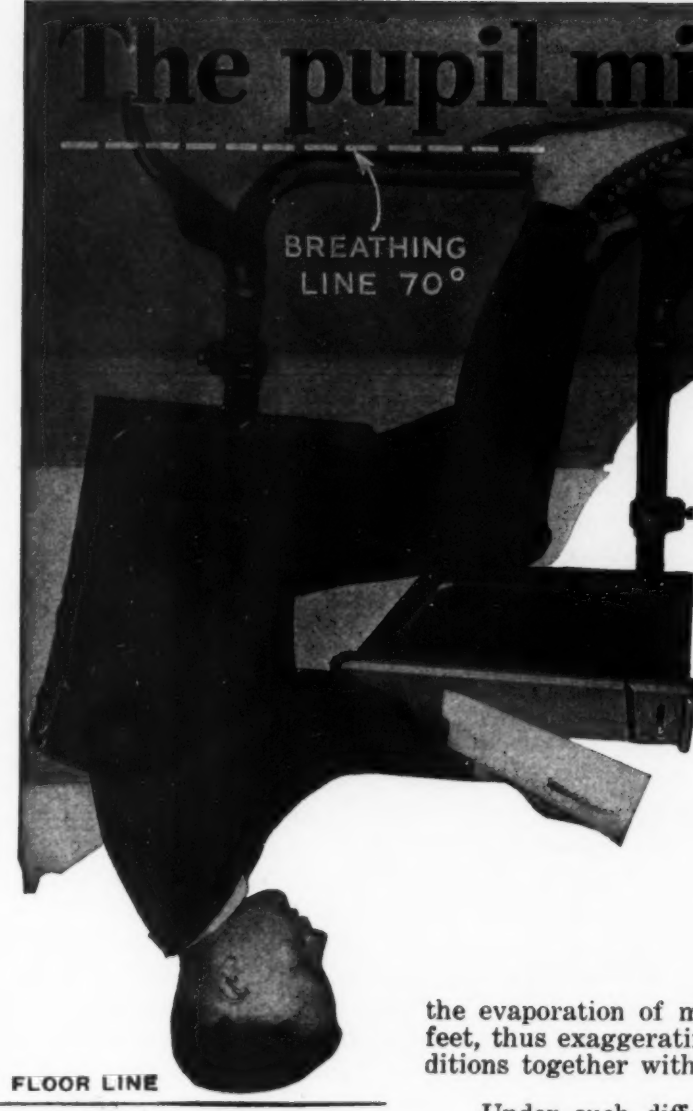
9. Ragged or unsightly books should be mended or discarded.

10. Cases should be uniform. Steel stacks are preferable, but any kind of good, uniform, open case is acceptable.

11. Various committees studying the high school library situation have practically agreed upon the following suggestions: for a high school of fifty pupils or more an initial appropriation of \$200 and thereafter an annual appropriation of \$50; fifty-one to 150 pupils, an initial appropriation of \$300 and thereafter an annual appropriation of \$100; 151 to 200 pupils, an initial appropriation of \$400 and an annual appropriation of \$150; 250 or more, an initial appropriation of \$500 and an annual appropriation of \$200.

12. An accredited high school with an enrollment of 100 or more pupils should have a library of not fewer than 1,000 books.

# The pupil might better be upside down



BREATHING  
LINE 70°

FLOOR LINE

60°

—so far as the  
temperature found  
in some school rooms  
is concerned

**Y**ET this temperature condition actually exists in the average poorly ventilated school room. Hot heads are not conducive to clear thinking—neither are cold feet. In classrooms with ordinary ventilation, the temperature at the floor line is often 10 degrees colder than that at the breathing line. Under such conditions if the head is reasonably cool, as it should be, the feet are “frozen.” Don’t forget that when a child’s feet are wet from rain or snow, the evaporation of moisture draws heat from both the shoes and the feet, thus exaggerating the effect of the cold temperature. These conditions together with stagnant air are prolific causes of colds.

Under such differences of head and floor temperatures, and bad ventilation, a pupil cannot concentrate much better than if he were turned upside. His marks suffer and so does his health.

Ideal conditions are not difficult to secure. A uniform temperature is obtained by the proper use of the PEERVENT Unit Ventilation System which reduces this temperature difference to only 2 degrees. This system discharges into the classroom the correct amount of fresh air, warmed to the proper temperature, at a velocity sufficient for complete diffusion, and vents the vitiated air through properly designed and properly located openings. The temperature of the entering fresh air may be controlled by a thermostat.

When PEERVENT Units are used, unoccupied cold rooms may be heated quickly by opening the recirculating damper. This automatically closes the fresh air inlet.

PEERVENT Units make each room independent of the others and only the rooms in use need be ventilated. PEERVENT Units are absolutely silent in operation—there is no vibration. For better ventilation, investigate the new improved PEERVENT Unit, as developed by the “PIONEERS IN UNIT VENTILATION.”



PEERLESS UNIT VENTILATION CO., Inc.

BRIDGEPORT, CONNECTICUT

*Pioneers in Unit Ventilation*

Resident Engineers in Principal Cities from Coast to Coast



# An Intensive Summer Course for Janitor-Engineers

*A two weeks' practical training course is offered by the board of education, Minneapolis, Minn., for ambitious men who are interested in the vocation of schoolhouse custodian*

**“WANTED:** A man of high character to manage property valued at \$1,000,000.

This investment consists of a modern school building. The man to fill the position should understand the theory of heating, ventilating, electric and plumbing equipment and he should be experienced in the practical operation of this equipment. He should understand the best and most economical methods of cleaning walls, floors, wood work, furniture and glass. He should have a clear conception of his social and moral status towards teachers and pupils in a school building and should possess the combined qualifications of an exemplar, a diplomat, an expert housekeeper, a safety engineer and an expert mechanical engineer.”

The immediate reaction after a careful reading of this specification is that it comprises a rather big order to fill, especially when viewed from the standpoint that it has been the belief heretofore that any man picked up on the street could accept-

ably fill the position of a schoolhouse custodian and janitor-engineer.

For a great many years the training of efficient business people and school teachers has been an important function of our educational institutions. It has been recognized only recently that the buildings in which these business people and teachers are housed must be put in charge of competent janitor-engineer custodians if the buildings are to be properly and efficiently cared for.

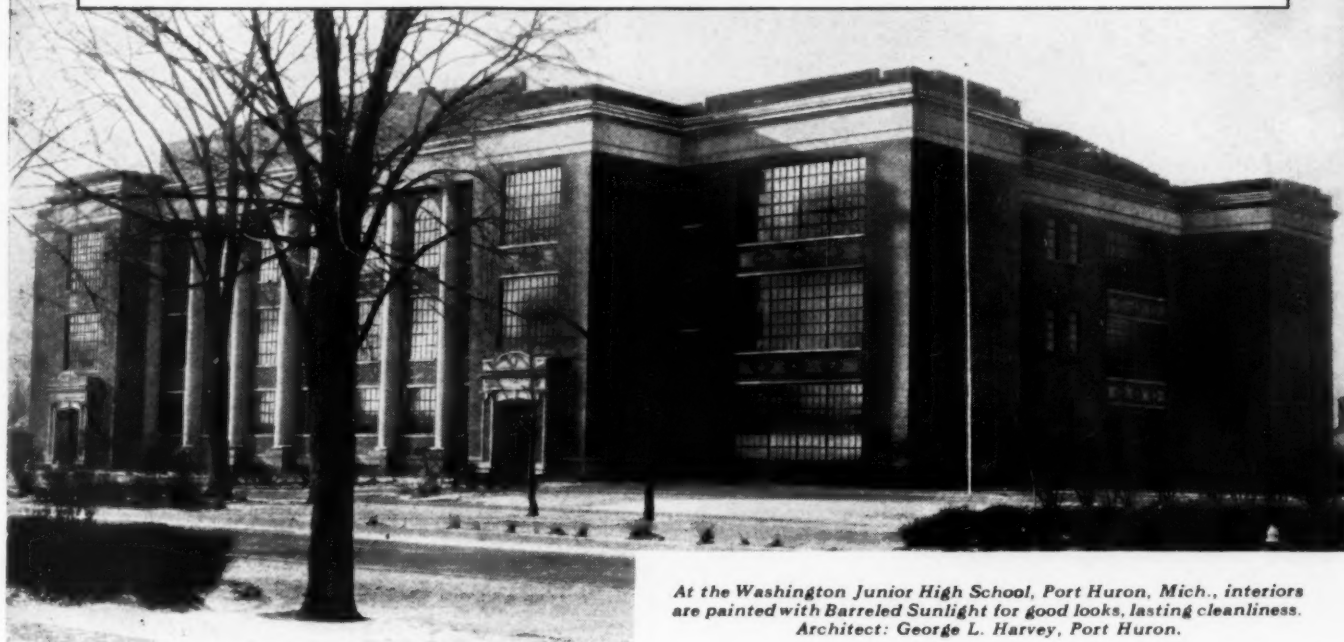
School administrators are therefore asking: Where can such competent custodians be found? The answer is: Nowhere.

To aid in reaching a solution of this perplexing problem, a number of training schools for janitor-engineer custodians have been established throughout the United States. The persons attending these schools are not confined to any particular group, but include the janitor-engineer custodians of all types of buildings including public schools, industrial institutions and offices.

TIME	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY	
8:15 A.M. to 9:00 A.M.	Registration	Address	Address	Inspection Trip MINNEAPOLIS & ST. PAUL School Buildings.	Address	Address	
9:00 A.M. to 10:30 A.M.	Housekeeping Lesson 1	Housekeeping Lesson 2	Housekeeping Lesson 3		Housekeeping Lesson 4	Housekeeping Demonstration Lesson 5	
10:30 A.M. to 12:00 P.M.	Heating & Ventilating Lesson 1	Heating & Ventilating Lesson 2	Heating & Ventilating Lesson 3		Heating & Ventilating Lesson 4	(Classes visit schools for this demonstration)	
12:00 P.M. to 1:30 P.M.	Lunch Period				Lunch Period		
1:30 P.M. to 2:30 P.M.	Conference Class	Conference Class or Spec Demonstration	Conference Class		Conference class or Spec Demonstration		
2:30 P.M. to 4:00 P.M.	Maintenance Management Lesson 1	Maintenance & Management Lesson 2	Maintenance & Management Lesson 3		Maintenance & Management Lesson 4		
AFTER 4:00 P.M.	Recreation & Entertainment	{ Tennis Kitten Ball Horse Shoe		Hand Ball Picnic. Banquet	Theatrical Sight-Seeing		

Program and time-table for the first week of the summer course.

# Here's a "Daylight" School!



At the Washington Junior High School, Port Huron, Mich., interiors are painted with Barreled Sunlight for good looks, lasting cleanliness. Architect: George L. Harvey, Port Huron.

## Barreled Sunlight helps to keep it well lighted, and insures lasting cleanliness as well . . .

**W**IDE window frames, narrow steel sash, plenty of panes . . . Classrooms at the Washington Junior High School are flooded with daylight.

Unpleasant glare has been avoided, a soft agreeable working light has been assured, by painting interiors with lustrous satin-smooth Barreled Sunlight.

Not only distinctively good looking, but decidedly practical. Barreled Sunlight's satin-smooth, lustrous surface stubbornly resists yellowing. Stays clean for a surprisingly long time. An occasional washing removes all superficial dust and smudges. When a thorough cleaning becomes desir-

able, Barreled Sunlight washes like tile without wearing away. Initial cost is reasonable; maintenance costs are decidedly low.

Barreled Sunlight blends readily with any good oil color, producing beautifully clear, lasting tints to match any desired scheme of decoration.

For more complete information . . . for a sample panel . . . please mail the coupon.

U. S. Gutta Percha Paint Co.,  
47 E Dudley St., Providence, R. I.  
Branches or distributors in all principal cities. (For Pacific Coast, W. P. Fuller & Co.)



### Easy to Tint

Barreled Sunlight is readily tinted any desired shade with ordinary colors in oil. Quantities of 5 gallons or over are tinted to order at the factory without extra charge.

**Barreled**  
Reg. U. S. Pat. Off.  
**Sunlight**

U. S. Gutta Percha Paint Co.  
47 E Dudley Street, Providence, R. I.

Please send me your descriptive booklet, and a panel painted with Barreled Sunlight. I am interested in the finish checked here:

Gloss ☐ Semi-Gloss ☐ Flat ☐

Name

Street

City  State

TIME	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
8:15 A.M. to 9:00 A.M.	Registration	Address	Address	Inspection Trip MINNEAPOLIS & ST. PAUL School Buildings.	Address	Address
9:00 A.M. to 10:30 A.M.	Housekeeping Lesson 6	Housekeeping Lesson 7	Housekeeping Lesson 8		Housekeeping Lesson 9	Housekeeping Demonstration Lesson 10
10:30 A.M. to 12:00 M.	Heating + Ventilating Lesson 5	Heating + Ventilating Lesson 6	Heating + Ventilating Lesson 7		Heating + Ventilating Lesson 8	Classes visit schools for this demonstration
12:00 M. to 1:30 P.M.	Lunch Period				Lunch Period	
1:30 P.M. to 2:30 P.M.	Conference Class	Conference Class or Spec. Demonstration	Conference Class		Conference Class or Spec. Demonstration	
2:30 P.M. to 4:00 P.M.	Maintenance + Management Lesson 5	Maintenance + Management Lesson 6	Maintenance + Management Lesson 7		Maintenance + Management Lesson 8	
AFTER 4:00 P.M.	Recreation + Entertainment	Tennis Kitten Ball Horse Shoe	Hand Ball Picnic Banquet	Theatre Sight-Seeing		

Program and time-table for the second week of the summer course.

The board of education of Minneapolis, Minn., has conducted a training school of this type for fourteen years. The school is run eight hours a day five and one-half days a week for eight months each year. The 1929-30 attendance has averaged 450 students. The school board has provided fully equipped quarters including classrooms, laboratory, demonstration station and reference library. There is also a highly competent staff of instructors on full-time duty. The Minneapolis public school buildings are used as a laboratory for the field and demonstration work given the students. This combines theory with practice in an unusual and desirable way.

#### First Course to Start June 16

During the week beginning June 16, an intensified summer school course will be conducted for janitor-engineer custodians. The course is open to persons from any part of the United States. The regular training school quarters, equipment and library will be utilized for classrooms and for laboratory work, and field work will be practiced and demonstrated in the school buildings throughout the city. A second intensified summer course for second-year students will be held during the week beginning June 23. The course it is specifically stated, is "for ambitious men who have taken a serious interest in the vocation of a janitor-engineer custodian."

John Absalom Garber in "The School Janitor"<sup>1</sup>

<sup>1</sup> Department of the Interior, Office of Education, Bulletin, 1922, No. 24.

says: "There is probably no other governmental position of equal responsibility filled by appointees so entirely lacking in technical training and oversight as in the case of school janitors. As a consequence, most of our school janitor service is haphazard. Even among the better class of janitors, the work is usually done by rule-of-thumb methods, and such methods are sure to break down whenever there is a change in conditions.

"There is no sufficient reason why scientific knowledge and methods should not rule in the janitor service just as fully as in any other department of the school system.

"Before any one receives an appointment as janitor, it should be known that he has expert knowledge of the best modern methods of sweeping, cleaning, dusting and general sanitation.

"If school boards, superintendents, principals, teachers, parents and janitors themselves can be led to understand and appreciate the importance of the janitor as a responsible school officer, and can be shown wherein the service should be improved and the methods by which this may be accomplished, it is believed that a valuable service will have been rendered to the cause of public education."

#### What the Course of Study Comprises

The training school as it is conducted by the Minneapolis Board of Education, comprises: a competent staff of instructors, with years of practical experience as training school teachers—





The Great Neck High School, Great Neck, Long Island, is equipped throughout with New and Improved du Pont Tontine washable window shades.

## Tontine Washable Window Shades go easy on the Replacement Budget

**W**HAT is your major consideration in selecting window shades? Durability, isn't it? That's why we suggest that you investigate du Pont Tontine shades. For durability they are in a class by themselves. They are washable. They can be scrubbed clean with soap and water, renewing their beauty and prolonging their life.



The New and Improved Tontine window shades are wear-defying because they are made with the same basic substance as the famous du Pont

Duco. They will not pinhole or fray. Sunlight will not fade them. Rain will not harm them.

For the sake of economy you should know about this new window shade material. Write to us for full particulars. Use the coupon below. E. I. du Pont de Nemours & Company, Inc., Fabrikoid Division, Newburgh, N. Y.

Canadian subscribers address: Canadian Industries, Limited, Fabrikoid Division, New Toronto, Ontario, Canada.



# TONTINE

REG. U.S. PAT. OFF.

THE WASHABLE WINDOW SHADE

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Desk N. S. 5, Newburgh, N. Y.

Please send me complete information about Tontine, the washable window shade.

Name \_\_\_\_\_

Address \_\_\_\_\_

men who have been promoted from the ranks because they possess the expert qualifications of janitors, engineers and custodians; a well organized training school that has been in operation for upward of fourteen years; a laboratory and demonstration station fully equipped with demonstration boiler, pumps, engines, valves, traps, separators, motors, temperature control equipment and a complete line of typical kinds of heating, lighting, plumbing, ventilating, electrical and other mechanical devices, apparatus and fixtures to be found in school buildings; a complete library of text and reference books.

Class and laboratory work is conducted at the central training school. Field practice and demonstration work are done by taking the classes to the public school buildings throughout the city where actual operations are performed by the students.

#### *Students Receive Practical Instruction*

The school buildings comprising the school system are used for field work. The widely differing types of building construction and of mechanical equipment to be found in a number of school buildings representing different eras of architectural design, building construction and mechanical equipment, present a field for diversified study and practice which is invaluable in connection with the work of a training school. Classes taken from one building to another may be instructed in a wide diversity of problems in house-keeping and in the operation and management of widely differing kinds and types of equipment.

In each of the one-week courses six and one-fourth hours each day will be devoted to intensive training. Classes will start at 8:15 a.m. and close at 4 p.m. with one and one-half hours, from 12 to 1:30 p.m., for lunch.

The work is conducted in the janitor-engineer training school of the Minneapolis public school system. Upon application a complete bulletin of this training school will be furnished free of charge. Each student may enroll for one or two weeks as he chooses. The enrollment fee is \$10 a week, \$20 for the two full weeks. Good living accommodations at from \$1 to \$2 a day may be secured within two or three blocks of the training school.

Special attention outside of regular class hours is given by members of the teaching staff to the answering of special questions asked by students. Special consideration is given to the off-time of students in the afternoons and evenings for their recreation, amusement and entertainment.

The schedule for the summer work is shown in the accompanying diagram.

## Financing Equal Education

"The citizens of California have dedicated themselves so thoroughly to their schools that they believe in adequate support for public education, equal educational opportunities of elementary and secondary levels available for all youth, differentiated secondary school curriculums suitable to the needs of individuals and a program of higher education for secondary school graduates who may need or desire further education of a professional or academic character," writes V. Kersey, superintendent of public instruction for California, in the *United States Daily*.

"The problem of adequate financial support is one that may be solved either by upward revision of present tax levies or by reconstruction of the existing tax system.

"Any program of revision of our existing financial system should provide a material increase in school funds, especially for elementary schools and for junior colleges. It is well that those in public education give much thought to the theory of public school finance.

"California demands sufficient finance for its schools, proper buildings, appropriate equipment and supplies, good teachers adequately paid and a liberal extension of educational service through the schools.

"Tax theory in California, as represented by the recommendations of the tax commission, definitely looks to three developments for the future: a property tax of reduced amount, a business tax on all business activities operating within the borders of the state and a personal tax levied upon all residents of the state.

"The greatest hope resides in the possibilities of a personal income tax. Such a tax system is not at hand and must be dependent upon a public attitude not yet created.

"Committees representing the various administrative groups, teacher organizations and lay organizations are offering their services to the California commission for the study of public education in this regard.

"All problems of public education in California revolve around the matter of finance. Proposals in this connection should be characterized by the following:

"Applicability to the entire state system with no curtailment of any phase of proper educational development.

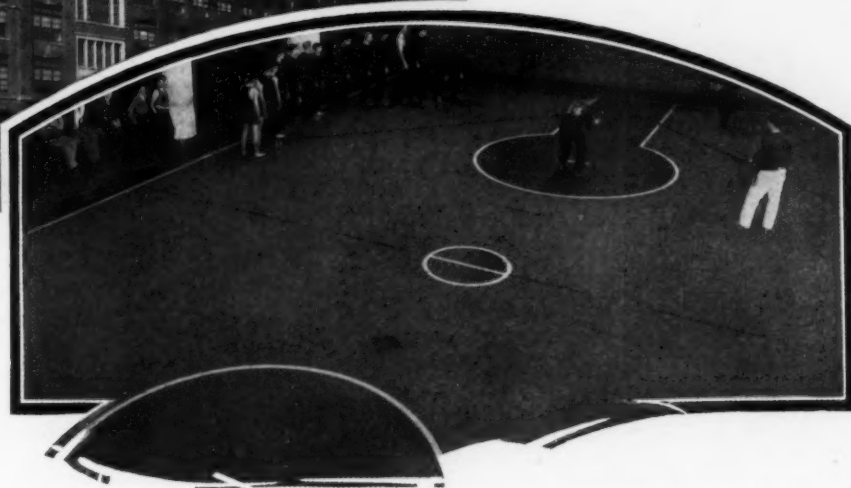
"Provision of continuous and stable funds based upon educational needs.

"Increased state support.

"Equality of educational opportunity by means of an equalization of burden of school costs."



*Immense Continuation School, Milwaukee, Wis., and a section of the Bloxonend Floor in one of its two great gymnasiums. Van Ryn & De Gelleke, Architects.*



## NATION'S LARGEST SCHOOL BUILDINGS USE **BLOX-ON-END** FLOORS

**T**HE Central Continuation School, Milwaukee, Wisconsin—one of the Nation's largest schools, with 20,000 students enrolled—contains two great gymnasiums. Both are equipped with Bloxonend Flooring.

Bloxonend Flooring is durable, smooth, even and absolutely splinterless—it is made of yellow pine and the tough end-grain forms the wearing surface. The end-grain fibres furnish a secure footing and prevent many accidents due to slipping.

Bloxonend Flooring is resilient, quiet and fast; it takes an excellent finish and maintains an attractive appearance indefinitely.

Leading architects everywhere specify Bloxonend Floors in the better schools—for gymnasium, shops, corridors and auditoriums. Faculties and school boards endorse them.

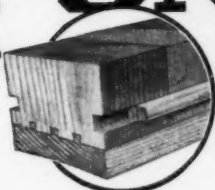
Special school booklet will be sent promptly on request. Write today for your copy.

**CARTER BLOXONEND FLOORING COMPANY**  
KANSAS CITY, MISSOURI

*Branch Offices in Leading Cities—See Sweet's*

# **BLOX-ON-END FLOORING**

Bloxonend is made of Southern Pine with the tough end grain up. It comes in 8 ft. lengths with the blocks dovetailed endwise onto baseboards.



*Lay's Smooth  
Stay's Smooth*

*Leading School Architects specify  
Bloxonend Floors for Shops and  
Gymnasiums in the country's  
best schools.*



## News of the Month

# Business Officials Complete Plans for New Orleans Meeting

THE National Association of Public School Business Officials is holding its nineteenth annual convention in New Orleans this year, from May 20 to 23. Members from all over the United States and from Canada are planning to attend, and a program has been worked out that will contain much of interest for each person present.

On the afternoon of Monday, May 19, a reception will be held for the members in the lobby of the Hotel Roosevelt where the meetings of the association are taking place. On the reception committee are: Henry C. Schaumburg, ex-officio chairman, president, Orleans Parish School Board; A. J. Tete, chairman, assistant superintendent and secretary, New Orleans Public Schools; Nicholas Bauer, superintendent of schools, New Orleans; Phil G. Ricks and Edmund J. Garland, members, Orleans Parish School Board; H. B. Zeringue, chief accountant and Jacob Schlosser, superintendent of maintenance, Orleans Parish School Board.

Following the opening of the exhibits on Tuesday morning, the regular sessions will begin. Reports of the various officers and committees will be given and the president of the association, C. E. C. Dyson, architect, board of education, Toronto, Canada, will make the presidential address. Zeph Hilton, member of the board of education, Toronto, will also present a paper on "What the Layman Needs to Know About the Business Management of Public Schools."

### *Programs Are Well Arranged*

The afternoon session will be given over to papers and to conferences. H. Giles Martin, director, Delgado Central Trade School, New Orleans, will talk on "The Values to Superintendents of Departmental Per Capita Costs in Trade Schools." William C. Bruce, editor, *American School Board Journal*, will give a paper on "The Future Outlook in Financing Public Schools." Harry D. Payne, architect, Houston, Texas, will tell of "The Lure and Interest of the Small Schoolhouse," while "Peculiarities of School Building in the South" will be discussed by Roscoe P. DeWitt, Dallas, Texas. Two conferences will be held—one on building problems, led by Irwin C. Catherine, Philadelphia, and the other on small town problems. These problems will also be discussed at length at round tables that are to be held in the evening.

A paper by E. E. Oberholtzer, superintendent of schools, Houston, Texas, on "The Superintendent and Business Manager of a School System in Cooperative Service" will open the Wednesday morning session. Other papers to be given are: "Canadian Study in Educational Finance," N. H. Bilbrough, chief accountant, Toronto,

Canada, and "The Necessity for a Detailed System of Accounting in Every School District," Edward Merchant, secretary and business manager, Philadelphia. The report of the research committee on "Fire and Other Insurance for Public School Property," by H. C. Roberts, secretary, board of education, Sioux City, Iowa, and the report of the research committee on "Selection, Purchase, Storage and Distribution of Public School Supplies," by J. S. Mullan, purchasing agent and secretary, Rochester, N. Y., will be given at this session. The report of the nominating committee will also be given at this time.

The afternoon will be devoted to a tour of New Orleans. Round tables on finance and insurance, on supplies and purchasing and on maintenance problems will be held in the evening.

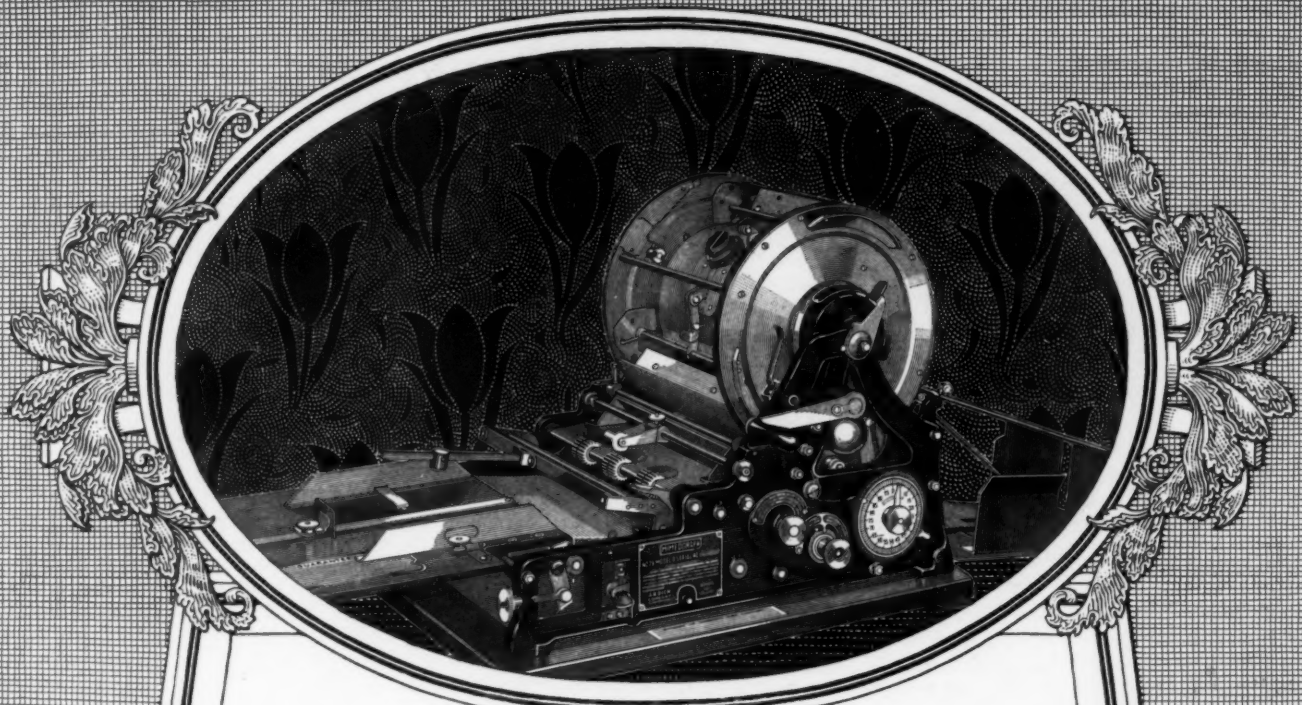
### *Tour of Historic Sections Is Planned*

Thursday's program will be opened by John B. Wynkoop, business manager, Bridgeport, Conn., with a paper, "Financing New School Construction." Two research committee reports, will be given: "Training of Public School Janitor-Engineers," R. W. Adkisson, clerk, Okmulgee, Okla., and "Treatment and Care of Floors in Public School Buildings," W. E. Whalin, superintendent of buildings and grounds, Oakland, Calif. A paper, "Vacuum Cleaning," will be presented by H. S. Ganders, University of Cincinnati. The election of officers for the coming year will close this morning's session.

A tour of the famous French and Spanish sections of New Orleans and harbor trips will be made in the afternoon, and the annual banquet of the association will be held in the evening.

The session will close on Friday morning. At this time invitations for the meeting place of the next convention will be received. W. E. Record, business manager, Los Angeles, Calif., will present the report of the third annual convention of the California Public School Business Officials' Association, and R. L. Daly, auditor, St. Louis, will give the report of the research committee on "Public School Pupil Cost Accounting." Following the reports of the committee on resolutions and the committee on audits, whatever general business is on hand will be completed and the meeting adjourned.

Present officers of the association are: president, C. E. C. Dyson; vice-president, Charles Lee Barr, assistant supply commissioner, St. Louis; secretary, John S. Mount, inspector of accounts, state department of public instruction, Trenton, N. J.; treasurer, Henry W. Huston, auditor, state department of public instruction, Trenton, N. J.; executive committeeman, George King, clerk, board of education, Salt Lake City, Utah.



## SPRING FEVER

Spring, that instills its turbulent unrest in every boy and girl, is a period of real stress for teacher and supervisor. Examinations come on as the end of the term approaches. School activities increase. Clerical work bulks large. And few are the helpers that can equal the Mimeograph in cleaning up routine work and preparing teaching aids that will hold the pupil's interest in his work. Illustrated lesson sheets, programs, school news, graphic problems, room charts and forms—these and a multitude of other things written, typewritten or drawn, the Mimeograph will duplicate accurately, thousands in every hour. Its superior stencil sheets, Mimeotype and the new Cellotype, lower in cost now than ever before, make the dissemination of needed information an easy task for teachers and school executives. Let us send you our folder explaining the varied helps the Mimeograph process can give you. Address A. B. Dick Company, Chicago, or 'phone branch office in any principal city.

# M I M E O G R A P H





## News of the Month

### 250 High School Pupils Participate in Scholastic Awards

Two hundred and fifty high school pupils share in the distribution of the \$4,500 in prizes in the sixth annual scholastic awards, the national prizes in literature and art for high school pupils which are sponsored and conducted every year by *The Scholastic*, the national high school magazine. More than 40,000 pupils from every state in the country, Porto Rico, Hawaii and the Philippine Islands submitted material to the scholastic awards.

The awards began only six years ago, through admiration for the work of George Bellows, distinguished American artist. At first, they had hardly more than the nature of a local character but they branched out immediately to national proportions. Now there is not a state or American Possession that does not share in the competition. Porto Rico, the Virgin Islands and the Philippines participate and the winners represent every racial strain on this continent.

The judges, nearly all of them artists, speak with enthusiasm of the creative gifts which they detect striving for growth and expression in the work of the boys and girls who have reached the finals of this contest.

### Junior College Heads to Have Their Own Publication

A new national educational periodical, the *Junior College Journal*, will begin publication in October, 1930. It will be published by Stanford University Press, and will be under the joint editorial control of the American Association of Junior Colleges and the School of Education of Stanford University. The new journal will appear monthly with the exception of the summer months.

Dr. Walter C. Eells, of the Stanford University School of Education, will be editor-in-chief of the new periodical, with Doak S. Campbell, of Nashville, Tenn., secretary of the American Association of Junior Colleges, as associate editor.

### Ohio Education Department Adds a Night "Radio" School

The Ohio State Department of Education, according to announcement from the office of Dr. John L. Clifton, state director, has added to the means of education in the state, a night school. Every Wednesday and Friday night, from 7 to 7:15 o'clock there will be broadcast from the director's office, talks on "Civil Government by Those Who Govern." This is in response to continued appeal from all quarters of the state, not only from the schools, which last year listened to such a series on the Ohio School of the Air, but from innumerable adults who realize that they know too little about the functions of the officials whom they elect and who are appointed each year. To learn of these state duties and burdens from the individual on whose shoulders the responsibility rests is a

unique opportunity which radio offers to every home in the state.

In launching the new series, Doctor Clifton said, "We are happy to make available a clearer understanding of the state government, through the use of this new tool called radio. We have discontinued our daytime broadcast to schools, because we have reached the time of year when the final examinations and other affairs of the schools cause them to be less attentive."

### Students From Eight States Take Part in Dramatics Tournament

Dramatic clubs from universities and colleges from widely divergent parts of the country participated in the fifth university theater tournament held under the auspices of the school of speech and theater arts of Northwestern University, Evanston, Ill., April 10, 11, 12.

Arkansas was represented by Henderson State College, Arkadelphia, and the Harlequin Little Theater of Arkansas College, Batesville; Tennessee, by the Lincoln Players of Lincoln Memorial University, Harrogate, Tenn.; Illinois, by the Eureka College Players; Minnesota, by the Hamline Players of Hamline University, St. Paul; Nebraska, by the Creighton Players of Creighton University, Omaha; Ohio, by the Marietta College Players' Club, Marietta; South Dakota, by Theta Alpha Psi of Yankton College, Yankton, and Texas, by the Wiley Players, Wiley College, Marshall, Texas.

At the close of the three-day tournament, the Hamline Players were voted the winners with their play, "Master Patelin, Solicitor." "Fixins," presented by Henderson State College, won second place and "Aria da Capo" given by the Eureka College Players, third.

### Phillips Exeter Academy Receives Gift of \$1,000,000

A gift of \$1,000,000 has been made to Phillips Exeter Academy from Col. William Boyce Thompson, Yonkers, N. Y., an alumnus of the academy.

Colonel Thompson has already given funds for the gymnasium, swimming pool, baseball cage and running track which cost nearly a million dollars. He has also given in addition \$500,000 to build a science and administration building.

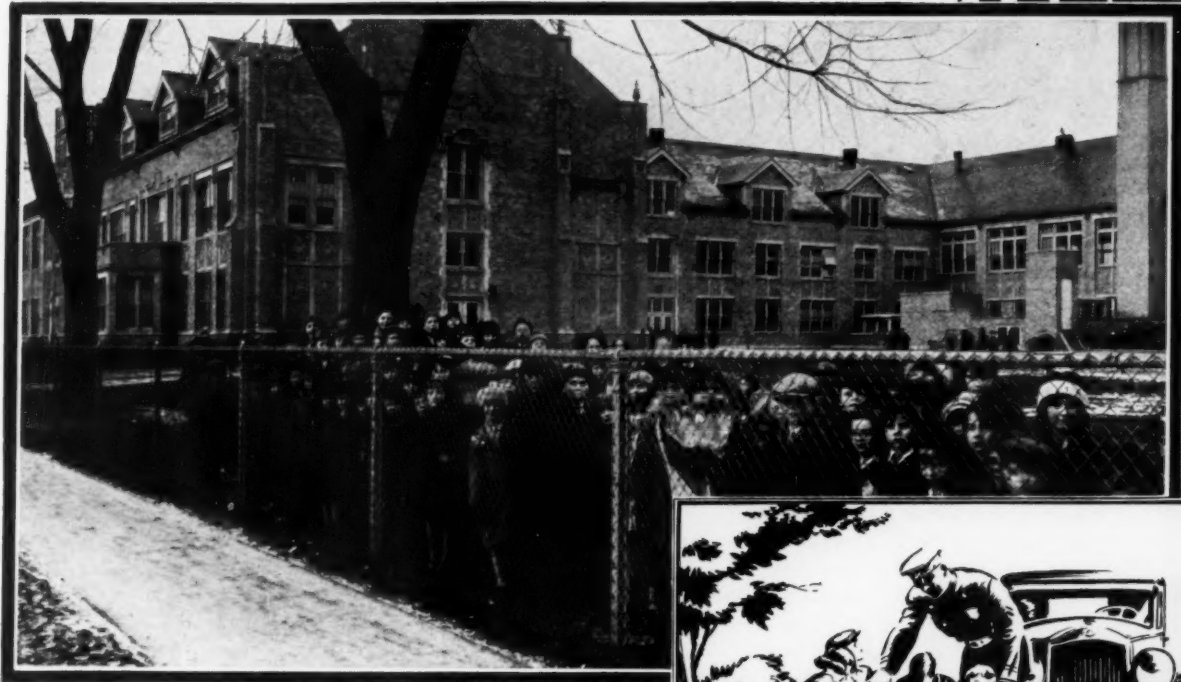
### Cornerstone of New \$1,500,000 School Is Laid

With the laying of the cornerstone, March 29, work was begun on the new \$1,500,000 high school for Pittsfield, Mass. William D. Goodwin, assistant principal of the high school with which he has been identified since his graduation from Amherst College in 1888, laid the cornerstone in the presence of 3,000 persons, 1,100 of whom were high school pupils.

The new building is to be completed by April, 1931.



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should have been fenced”**



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## News of the Month

### Brooklyn's New Trade School for Girls to Open in September

When the new \$1,354,000 Industrial High School for Girls, Brooklyn, N. Y., is completed next September, those girls who are not interested in or fitted for a formal type of education will be given courses in manicuring, massaging, needlework, millinery, dressmaking, power operating, home economics and tea room management.

According to Joseph M. Sheehan, associate superintendent of schools, "The Brooklyn Industrial High School for Girls is the city's answer to the problem of the manual-minded girl. Instead of failures in the formal academic courses, intended for the most part merely for preparation for college, we are after successes in those courses which are meant to train the eye and the hand. Not only will our pupils be doing the work they are best fitted for and which they can enjoy most, but through the medium of a placement bureau in the school we intend to find suitable positions for them when they graduate."

### Wisconsin School of Education May Become College

The school of education at the University of Wisconsin will shortly become the college of education if a move that has been made by the college of letters and science is approved by the faculty of the college of agriculture and the board of regents, says the *Wisconsin Journal of Education*.

The school of education, which is at the present time a division of the college of letters and science, would rank with the other undergraduate schools in the university, and all undergraduate courses in education, including the Wisconsin High School, would be included in its curriculum. The college would be authorized to grant the degree of bachelor of arts in education.

### Extension Courses for Music Supervisors Offered

For the second consecutive year, extension courses for music supervisors will be offered at the National High School Orchestra and Band Camp, Interlochen, Mich., this summer by Teachers College, Columbia University, the School of Music of the University of Michigan and the Cincinnati Conservatory of Music. Dates of the camp are from June 30 to August 23.

This plan is in keeping with the demand of music supervisors for credit courses which will enable them to live and study in the inspirational environment of the camp and associate with the leaders and teachers who congregate each summer at Interlochen. All courses offered are exemplified in the activities of the camp; and the camp's band, orchestra and choir provide opportunities for observation and practical demonstration.

The instructional staff this summer will number over thirty teacher specialists, including Vladimir Bakal-

einikoff of the Cincinnati Symphony Orchestra, A. A. Harding and Raymond Dvorak of the University of Illinois Band, Orien E. Dalley, University of Wisconsin, Thaddeus P. Giddings, supervisor of music, Minneapolis, Minn., J. E. Maddy, director of the camp, and Edith Rhett, educational director of the Detroit Symphony Orchestra.

### Buffalo Raises Fund for Loans to High School Pupils

Recognizing that high school training promotes better citizenship and proper character development, Buffalo, N. Y. has instituted a fund whereby every boy and girl who is worthy may obtain sufficient funds to carry them through high school.

The money that was the nucleus of the fund was donated by a citizen, but members of the public are invited to contribute. A corporation has been formed by parent-teachers associations to administer this student aid fund.

The fund will provide loans for high school pupils who are without funds to carry on their school work, and only 2 per cent interest will be charged on the money borrowed. The loan and interest are payable only when the course is finished.

The *Journal of Education* states that the city of Buffalo, recognizing the importance of this measure, will expand the fund as much as possible in order to benefit many pupils.

### Education Office Publishes Research Studies

A bibliography of research studies in the field of education for 1927-1928 has just been published by the United States Office of Education, the compiler in the library division, Edith A. Wright, stated recently.

This "Bibliography of Research Studies in Education, 1927-1928," Miss Wright pointed out, continues the list started in 1926-1927. The material, which consists of 2,403 titles of research, has been classified by subject, cross-indexed in some instances and appended by an index of author and subject and another of institutions.

The commissioner of education, William John Cooper, in a letter to Secretary Wilbur transmitting the bibliography, stated that research and experimentation have become so extensive in the United States as to make it almost impossible to keep informed concerning the latest approved school procedures and newest truths about child development and management, so "in order that the large number of persons interested in educational research might be kept informed and the duplication of effort might thereby be reduced, the Office of Education in September, 1927, began collecting and disseminating information concerning all investigations in education."

Miss Wright stated that the collection contains both published and unpublished studies.

A copy of the bibliography may be procured from the Government Printing Office for 25 cents.



## Down the Death-Lined Streets a Tall, Gaunt Figure Strode

In 1879, a certain southern city was fighting its most desperate battle.

Throughout the town, unseen hosts of Yellow Fever germs made swift, silent raids, leaving grim trails of disease and death. Business stood still. Guardsmen patrolled the otherwise deserted streets.

Medical men fought desperately to stem the ever-swelling legions that marched against them.

Into this picture the first Clow Soldier of Sanitation was called. Down the death-lined streets he strode, a tall, gaunt figure—but the figure of vic-

tory. He cleaned up the sources from which the Yellow Fever armies drew replacements. And the medical men wiped out the enemy.

Today this man leads Clow's Soldiers of Sanitation in equally important battles against uncleanness, insanitation, pollution and disease.

Each of these men is a specialist in working out plumbing installations in the public places, where disease germs rally so readily. At his finger tips is the experience from a time long before the great battle in a southern city—to the

modern battles in the schools, hospitals, industrial plants and public buildings of today. At his back is the most complete line of specialized plumbing fixtures in the world, designed to help him as no other fixtures can.

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For 52 years, Mr. W. E. Clow, Sr., has led Clow's Soldiers of Sanitation by crowding into the heat of every fight where his years of skillful experience will turn the battle against insanitation, trouble and waste.



## News of the Month

### Nearly Fifty Million Is Building Budget for New York City

The building committee of the board of education of New York City has submitted a budget estimate of \$47,325,000 for 1930. Seventy thousand additional seats are provided.

The boroughs of Brooklyn and Queens will receive the largest share. Eight new elementary schools, two high schools, one high school addition and a vocational school will be Brooklyn's share at a total cost of \$15,370,000. Queens will get twenty-nine elementary schools, two high schools and a vocational school at a cost of \$15,555,000.

### Widow Builds Public School as a Memorial to Her Husband

Titusville, Pa., is to have a new school building that is to be the gift of Mrs. Mary Colestock who is giving the money for the school as a memorial for her husband, Daniel Colestock, who died about ten years ago. The new school, which will cost \$300,000 or more will not necessitate any financial outlay whatever on the part of the taxpayers of the community. Mrs. Colestock desired the memorial to her husband to be completed in her lifetime rather than to leave it in the form of a bequest.

Work will start on the new school in June and it is expected to be ready for use in September, 1931.

### Slight Gain Shown in Number of Private Academies

The number of private high schools and academies in the United States has increased but 200, or 8.9 per cent over the number reporting in 1915, the chief of the division of statistics, United States Office of Education, Dr. Frank M. Phillips, stated recently.

In explaining the reason for the apparent small increase of private institutions of this character during the long period, Doctor Phillips said there has been a tendency to provide larger schools rather than more schools.

"Reports were received from 2,350 schools in 1926 and from 2,448 in 1928," Doctor Phillips said. "These schools reported 18,025 instructors and 248,076 secondary pupils in 1926, and 20,333 instructors and 269,249 secondary pupils in 1928. The number of pupils graduated increased from 40,715 to 46,189 during this two-year period. No material change is noted in the percentage distribution of pupils among the four high school years since 1926, although changes have taken place since 1920 and earlier years. In 1920, 36.1 per cent of the enrollment were in the first year, and 16.6 per cent in the fourth year. In 1928, 31.5 per cent were in the first year, and 19.6 per cent in the fourth year. This reduction in the proportion of pupils in the first year, and the increase in the fourth year indicate better conditions concerning promotions, and an increase in the holding power of the schools. Expansion of the junior college idea may also be a

factor, since 11,200 pupils were registered for work beyond the fourth high school year.

"While the number of schools reporting has increased but 200, or 8.9 per cent over the number reporting in 1915, the number of secondary pupils enrolled has increased 73.6 per cent, the number in the fourth year increased 88.7 per cent, and the number of graduates increased 107.3 per cent. . . . The number of colored pupils of secondary grade is smaller for 1928 than for 1920, or for any year since 1920, although it represents an increase of 30 per cent over 1915.

"Military drill was given to 15,006 boys in 1926, and to 16,528 in 1928. The greatest number of boys in military drill in schools of this type was reported for 1918, when 31,532 boys received military training.

"Practically all of these private schools are organized on the regular four-year basis, and only a few reported either junior or senior departments or divisions."

### New York Plans Lincoln University

"An international seat of learning, which will promote world understanding through education" is the slogan for the new Abraham Lincoln University planned for Westchester County, New York, according to an announcement made by Dr. John Dewey, professor of philosophy, Columbia University, at a dinner recently given by the Abraham Lincoln Foundation at the Commodore Hotel, New York.

Roy Curtiss, president of the foundation, who has been planning the university for fifteen years, stated that 200 students will enter each year—two from each state of the union and two from the principal foreign countries—making the total enrollment about 1,500. The students will be selected on the basis of Lincoln-mindedness, with character as the first essential.

A faculty of twenty-five will be selected and before the school is opened will be given the opportunity to travel and inform themselves on international conditions and to hold mutual conferences. The curriculum will be determined at these conferences and will be concentrated on the aim of "promoting international understanding and the condition of being free of all indoctrinations of special views and beliefs."

The following persons have been named trustees of the new university: Doctor Dewey; Dr. David Starr Jordan, president emeritus of Leland Stanford University; United States Attorney Tuttle; Dr. William B. Millar, executive secretary of the Greater New York Federation of Churches; Governor Flem D. Sampson of Kentucky; George M. Verity, president of the American Rolling Mills; Dr. William H. Metzler, dean of the New York State College for Teachers; Dr. Arnold Bennett Hall, president of the University of Oregon; Brigadier-General Jay J. Morrow, former governor of the Canal Zone; Dr. Mary E. Wooley, president of Mount Holyoke College, South Hadley, Mass.; Jesse Grant Chapline, president of La Salle Extension University, Chicago; Dr. Eugene Randolph Smith, Brookline, Mass.; Prof. Michael Pupin, Columbia University, and Mr. Curtiss.

The course will be for six years, covering the years spent in senior high school and the four years of college.



## Slippery, Worn—

This picture of unprotected steps in the Wall Street Post Office in New York, was taken before Wooster Safe-Groove Stair Treads were applied. The adamant marble steps had succumbed to the constant tramp of thousands of feet. Not only did these dilapidated stairs present a very poor appearance but were worn and slippery to a very dangerous degree.

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## Safe, Economical—

Here are the same Wall Street Post Office steps after Wooster Safe-Groove Stair Treads had been installed. Two standard sections were combined to give a walking surface  $7\frac{1}{2}$ " wide. The alternating safe-grooves and ribs of anti-slip material provide a safe walking surface that is decorative, and at the same time economical.

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## News of the Month

### Vienna Summer School Will Give Interesting Courses

During the month of July, 1930, the University of Vienna, Austria, will give six seminars on education and psychology, kindergarten education and social welfare, the German language and literature, art, music and general culture.

Six weeks will be devoted to each course. Particulars in regard to the courses may be obtained from the Institute of International Education, 2 West Forty-Fifth Street, New York City, or the Austro-American Institute of Education, Elisabethstrasse 9, Vienna 1, Austria.

### Valuation of School Property Is Determined

Value of all property for public school purposes in the United States is \$5,486,938,599, or an average of \$218 per pupil, the statistician in the division of statistics, United States Office of Education, Emery M. Foster, stated recently.

California ranks first with an average valuation of \$386 per pupil, New York second, with \$353, and Michigan third, with \$351.

Mr. Foster pointed out that New York State is far in the lead as to total value with \$726,867,066, of which \$671,255,016 covers the value of sites and buildings, and \$55,612,050 for furniture, apparatus, libraries, and similar equipment.

California's value of all property is \$388,376,126, of which \$347,765,529 covers sites and buildings and \$40,610,597 for equipment.

Michigan, it was explained, ranks third with an average valuation per pupil of \$351, and a total value in actual investment of \$295,524,716.

In commenting on this subject, the acting chief of the division of statistics, Maris M. Proffitt, called attention to the more than \$3,000,000,000 spent yearly in the United States for both public and private school education, of which over \$2,000,000,000 is on public education.

Mr. Proffitt said that the cost of education does not appear so startling, and certainly not burdensome, when one compares the amount with the findings of Franklin J. Keller, who in a volume published in 1924, called "Day Schools for Young Workers," stated that the earnings of children between the ages of fourteen and seventeen years in the United States in 1920 amounted to \$4,605,000,000.

Mr. Proffitt stated that the total cost of public and private education is minimized by comparison. He added that the Office of Education has no statistics of its own on the earnings of children, but he said that Mr. Keller's figures seem reasonable. Other states rank in valuation of public school property, Mr. Foster indicated, as follows:

New Jersey with an average of \$336 per pupil or a total of \$255,717,495, of which \$238,060,786 covers sites and buildings, and \$17,656,708 for equipment; Massachusetts, with an average of \$389 or a total of \$244,892,494, with \$229,965,961 for sites and buildings, and \$14,926,533 for equipment; and Illinois with an average of \$279 or a total

of \$385,032,007, of which \$356,729,864 is for sites and buildings, and \$28,302,143 for equipment.

Pennsylvania has an average valuation per pupil of \$269 representing a value of \$507,417,115, of which \$462,429,680 is for sites and buildings, and the remainder, equipment, compared with Ohio, next in line, has an average value of \$222 representing a total of \$287,534,701, of which \$257,175,812 is for sites and buildings.

Mr. Foster's survey discloses six other states with totals between \$100,000,000 and \$200,000,000. Of these, four have properties valued above \$150,000,000—Texas, Missouri, Minnesota and Wisconsin. The others are Iowa and North Carolina.

Mr. Foster noted that in states with dense populations, the average per pupil tends to be diminished because classes are larger and equipment and buildings serve a greater number than in the more sparsely populated areas. He also stated that valuation in the older states of the East consists of numerous old buildings erected at a much lower cost than the buildings erected in the younger sections of the country, especially in recent years.

Mr. Foster pointed out that the modern building meets a newer educational demand which has added to the property valuation.

### High School Musicians to Hear Famous Masters

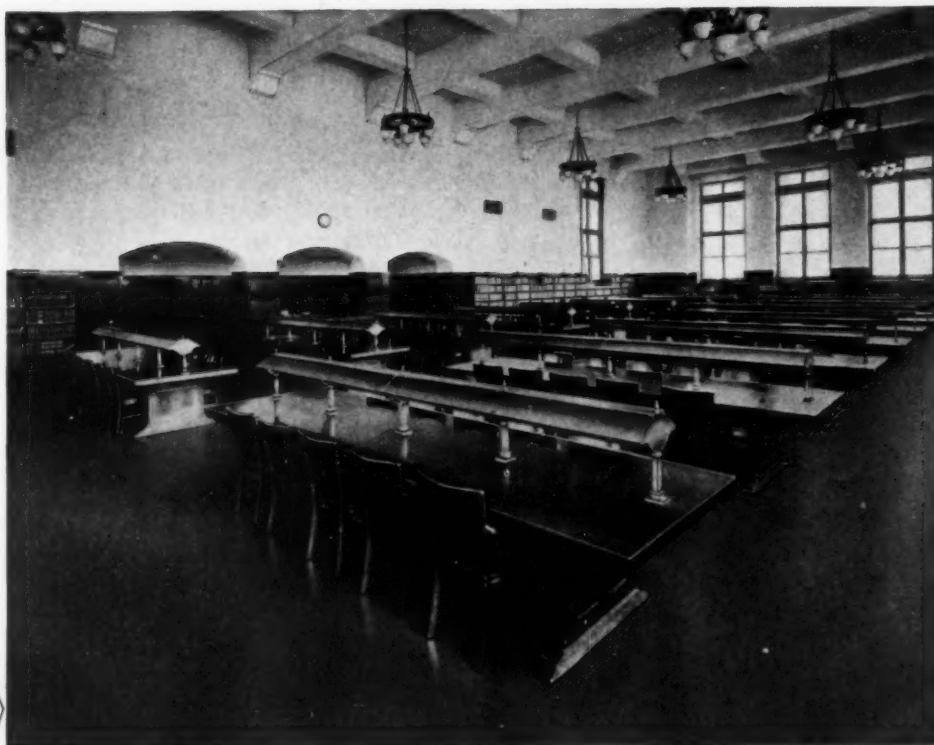
Many famous musicians are to assist in the instruction of the 300 high school musicians and those music supervisors who will carry on summer studies at the 1930 National High School Orchestra and Band Camp at Interlochen, Mich., June 30 to August 23. Announcement has been made of the incomplete list of guest conductors and soloists who will visit the camp. The list carries such widely known names as Carl Busch, Hollis Dann, Peter Dykema, John Erskine, Percy Grainger, Howard Hanson, Barre Hill, Redfern Hollingshead, Guy Maier, Earl Moore, Mozelle Bennet Sawyer, John Philip Sousa, Leo Sowerby, Edgar Stillman-Kelley and Henri Verbruggen.

### Trade School for the Southwest Opens in Dallas

The new trade school for Dallas, Texas, plans for which have been announced for several months, will be completed by September of this year, according to recent announcements. The new school is to be named the Southwest Vocational School. A complete vocational curriculum will be offered and when the school opens in September, courses will be offered in all the various printing trades and in the building trades. There are, it is said, 600,000 men in various mechanical trades in Texas, and the David Rankin Trade School in St. Louis is the nearest institution to the southwest area. According to a report of the state superintendent of public instruction 87,000 white boys in Texas leave school before they complete their high school course, and it is for these boys that the new school will provide.



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## In the Educational Field

PROF. GEORGE W. MCCOARD, oldest member of the faculty of Ohio State University, died on March 19 at the age of eighty-one years. PROFESSOR MCCOARD'S death ended forty-eight years of continuous service with the university.

R. C. COX, superintendent of schools, Troy, N. C., has resigned. He plans to enter business in Greensboro, N. C.

J. E. PEASE, superintendent of schools, Ravenna, Mich., for the last five years, has resigned.

R. W. FULLERTON, superintendent of schools, Harbor Springs, Mich., for three years, has resigned. HOWARD N. DICKIE, the present principal, will become superintendent.

E. W. LAWRENCE, of the Nichols Country Day School, Buffalo, N. Y., has been named headmaster of the Troy Country Day School, Troy, N. Y.

WILLIAM HOWARD BROWN, principal, Senior-Junior High School, Amherst, Mass., has been elected principal of the high school of Glen Falls, N. Y., to succeed EDWIN B. ROBBINS who has resigned.

ERNEST W. AIKEN, principal of the high school, Theresa, N. Y., has been appointed superintendent for the schools of the fifth supervisory district which includes the towns of Alexandria, Antwerp and Theresa. MR. AIKEN succeeds D. D. T. MARSHALL, who recently resigned because of ill health after serving the district for more than twenty-five years.

JOHN C. CALLAHAN, superintendent of public instruction for Wisconsin, has been chosen president of the National Association of State Superintendents of Public Instruction at their recent annual meeting in Atlantic City.

HENRY G. CLARK, district superintendent in the Chicago school system, has retired after a service of more than thirty years.

C. RAY HOLBROOK, superintendent of schools, San Bernardino, Calif., has been elected to the superintendency of the city schools of Santa Cruz, Calif., to fill the vacancy left by the death of KARL F. ADAMS.

EDNA F. LAKE, principal, Albany Academy for Girls, Albany, N. Y., has resigned and will leave at the end of the school year to spend some months in travel. She will be succeeded by MARGARET TROTTER, a member of the faculty of Miss Chandor's School, New York City.

WORTH MCCLURE, professor in the state normal school at Buffalo, N. Y., has been named superintendent of schools, Seattle, Wash. Prior to his going to Buffalo, MR. MCCLURE had served in the Seattle schools for seventeen years under the former superintendent, THOMAS R. COLE. MR. COLE has joined the faculty of the University of Washington.

DR. JEREMIAH E. BURKE has been reelected superintendent of the Boston Public Schools for a term of six years. DOCTOR BURKE is in his ninth year as head of the Boston schools.

SAMUEL ENGLE BURR, director of research, Lynn Public Schools, Lynn, Mass., has resigned to become superintendent of schools, Glendale, Ohio. Glendale is a residential suburb of Cincinnati. During the summer MR. BURR will teach three courses, Administrative Problems of the Village Superintendent, Current Curriculum Problems and Elementary Statistics, in St. Lawrence University, Canton, N. Y. He will take up his duties at Glendale in September.

MABEL C. BRAGG, assistant superintendent of schools, Newton, Mass., since 1915, will resign in June to become a member of the faculty of the school of education, Boston University.

DEAN WALTER WILLIAMS, of the school of journalism, University of Missouri, will succeed DR. STRATTON D. BROOKS as president of the university. DOCTOR BROOKS has been granted a leave of absence until his term ends. PROF. FRANK L. MARTIN will become head of the school of journalism.

D. D. T. MARSHALL, dean of the district superintendents of schools in New York State, has resigned as superintendent of the fifth supervisory district of Jefferson County. Mr. Marshall has been in educational work since 1878.

HAL ANDERSON has been named superintendent of schools, Corinth, Miss.

ELIZABETH MORROW, daughter of DWIGHT MORROW, United States Ambassador to Mexico, is attempting to lease an estate at Englewood, N. J., where she plans to open a school for young girls, according to recent news releases. MISS MORROW is an experienced teacher. Last Fall she became a volunteer instructor in a Mexican government school.

BENJAMIN H. ROOT, principal, Attica High School, Attica, N. Y., has been named superintendent of schools, East Rochester, N. Y. MR. ROOT succeeds JOHN E. DEMOREST.

L. D. HIGHTOWER, for the last seven years principal of the high school, Salida, Colo., has been named superintendent of schools to succeed C. E. TANTON who has resigned after twenty-three years of service.

JOHN W. DOBBS, JR., superintendent of the Colored School of Montezuma, Ga., for the last four years, has resigned.

C. R. MCCLELLAND, superintendent of schools, Monessen, Pa., has resigned his position to take effect at the end of his present term in July.

EUGENE C. STEVENS, principal of the Stevens, Albion and Ellsworth Elementary Schools, Denver, has retired after thirty years of service. He will be succeeded by CLAUDE B. PENTLETON.

DR. H. W. CHASE, president of the University of North Carolina for more than ten years, has accepted the presidency of the University of Illinois.

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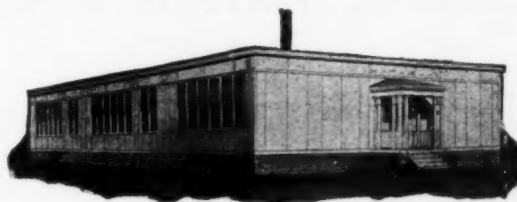
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## In the Educational Field

DR. WILLIAM J. O'SHEA, superintendent of schools, New York City, has been reelected for a term of six years, despite the fact that Doctor O'Shea will reach the retiring age of seventy in 1934. DOCTOR O'SHEA has occupied every position in the school system since he entered as a teacher in 1887.

DR. WALTER ALEXANDER GEESEY, superintendent of schools, Sunbury, Pa., for the last twelve years, died recently.

DR. ARTHUR W. FERGUSON, at present superintendent of schools, Swarthmore, Pa., has been elected superintendent of schools, York, Pa.

IRWIN LOWE has been named superintendent of schools of Pike County, Ky., to succeed FONSO WRIGHT who has resigned.

DR. GEORGE J. TRIPP, will complete fifty-one years of service in school work at the end of the present school year, when he plans to retire. DOCTOR TRIPP is at present a teacher in the Adrian High School, Adrian, Mich., although he has served as superintendent at Addison, Mich., and Morenci, Mich., president of Fayette Normal University, and commissioner of schools of Lewanee County, Michigan.

CARL M. BLAIR, superintendent of schools, Berlin, N. H., has resigned after nine years of service to become superintendent of schools, Lakewood, N. J.

WENDELL SOOY, superintendent of schools, Glen Rock, N. J., has resigned.

BYRON M. MCKNIGHT, superintendent of schools, Corrigan, Texas, is the new superintendent at Groveton, Texas, succeeding W. B. MILLS.

J. J. MONTGOMERY is the new superintendent of schools of the Smithville Independent School District, Smithville, Texas, succeeding J. K. BARRY.

R. F. DAVIS, superintendent of schools, Nacogdoches, Texas, died recently. He had served the Nacogdoches schools for twenty-nine years.

DR. CHARLES E. CHADSEY, dean of the college of education of the University of Illinois for ten years, died April 9, at the age of fifty-nine years, after a short illness.

S. W. SEALE, principal, Gonzales High School, Gonzales, Texas, has been named superintendent of the Sinton School, Sinton, Texas.

HENRY E. WINSTON, head master, Conant High School, East Jaffrey, N. H., has resigned. He has accepted a position at Fort Edward, N. Y.

DR. HAROLD W. CAMPBELL has been made associate city superintendent of the schools of Jamaica, N. Y.

CORA VANG, Seattle, is in charge of the special school that has been opened for Indian children at Harlem, Mont.

GEORGE J. SEAGER, superintendent of schools, Barre Town, Vt., has declined reelection and will give up his office in June to devote himself to business.

## Schools of Evansville, Ind., Provide Teachers' Travel-Study Fund

Ten thousand dollars, the same amount as in previous years, will be expended by the board of education of Evansville, Ind., in the summer of 1930 to provide for summer travel or study of teachers as follows: Length of service in the Evansville schools is to be the deciding factor, except that teachers who did not receive a 1929 bonus will be preferred over those who received a bonus in the summer of 1929.

## New Bulletin on School Sanitation Is Published

Improvement in sanitary conditions of schools in the promotion of health of the children is urged by the United States Office of Education in a recently published bulletin on school sanitation.

Proper heating and ventilation are regarded as factors having the most to do with the health of the children. Other conditions of the school environment reviewed by the bulletin include lighting, color of walls, personal cleanliness of the children, sanitary water fountains and playgrounds that can be used for various athletics.

### STATEMENT OF THE OWNERSHIP, MANAGEMENT, CIRCULATION, ETC., REQUIRED BY THE ACT OF CONGRESS OF AUGUST 24, 1912,

Of The NATION'S SCHOOLS, published monthly at Chicago, Illinois, for April 1st, 1930.

State of Illinois } ss.  
County of Cook }

Before me, a Notary Public, in and for the State and county aforesaid, personally appeared James G. Jarrett, who, having been duly sworn according to law, deposes and says that he is the business manager of The Nation's Schools Publishing Co., and that the following is, to the best of his knowledge and belief, a true statement of the ownership, management (and if a daily paper, the circulation), etc., of the aforesaid publication for the date shown in the above caption, required by the Act of August 24, 1912, embodied in section 411, Postal Laws and Regulations, printed on the reverse of this form, to wit:

1. That the names and addresses of the publisher, editor, managing editor, and business manager, are:

Publisher: The Nation's Schools Publishing Co., Chicago, Illinois.

Editor: Prof. M. V. O'Shea, Madison, Wis.

Managing Editor: John A. McNamara, Chicago, Illinois.

Business Manager: James G. Jarrett, Chicago, Ill.

2. That the owner is: (If owned by a corporation, its name and address must be stated and also immediately thereunder the names and addresses of stockholders owning or holding one per cent or more of total amount of stock. If not owned by a corporation, the names and addresses of the individual owners must be given. If owned by a firm, company, or other unincorporated concern, its name and address, as well as those of each individual member, must be given.)

The Modern Hospital Publishing Co., Inc., Chicago, Illinois;  
Dr. Otho F. Ball, Chicago, Ill. J. P. McDermott, Chicago, Ill.  
S. R. Clague, Chicago, Ill. John A. McNamara, Chicago, Ill.  
James G. Jarrett, Chicago, Ill. Ill.  
S. R. Latshaw, New York, N. Y. D. W. Sammons, Chicago, Ill.

3. That the known bondholders, mortgagees, and other security holders owning or holding 1 per cent or more of total amount of bonds, mortgages, or other securities, are: (If there are none, so state.) There are no bondholders, mortgagees or other security holders.

J. G. JARRETT, Business Manager.

Sworn to and subscribed before me this 25th day of March, 1930.

[SEAL]

J. P. McDERMOTT, Notary Public.

My commission expires August 10, 1933.

# The Fresh Air of Spring

now surges through open windows and open doors.

Now is the time to clean your painted walls, ceilings, and decorations with



and give them the appearance of new spring painting.

This cleaner will not harm any surface which water will not injure, and it many times saves the cost of repainting.



Ask your supply man for  
"WYANDOTTE"

The J. B. Ford Co., Sole Mfrs., Wyandotte, Michigan

# Name your own standards of heating service—

**O**BVIOUSLY, any school executive, mindful of student and faculty welfare, will set the standard for ideal heating performance rather high.

Dunham Differential Heating "performance," proved by hundreds of installations all across the country, will match your specifications, maintain flawless service throughout season after season.

Then, on top of the reliability and uniformity the school **MUST** have, Differential Heating delivers a fuel saving every executive

would like to have; a consistent cut in fuel of from 25 to 40%.

The operating principles that insure uniform heating service plus truly remarkable economy, are exclusive with Dunham Differential systems. No other heating plant can deliver hot steam, warm steam, cool steam, regulated in accordance with weather conditions. Differential Heating avoids the overheating that brings discomfort and fuel waste.

Look for the name  
**DUNHAM**

This nameplate identifies a genuine  
Dunham Thermostatic Radiator Trap



The Dunham Differential Vacuum Heating System and individual parts of the apparatus used in that system are fully protected by United States Patents Nos. 1,644,114, 1,706,401 and 1,727,965 and Canadian Patents Nos. 282,193, 282,194, and 282,195. Additional patents in the United States, Canada and foreign countries are now pending.

Investigate the unusual performance features of Dunham Differential Heating. Write for descriptive bulletins, and for facts on performance of installations in institutions comparable to your own.

## C. A. DUNHAM CO.

Dunham Building

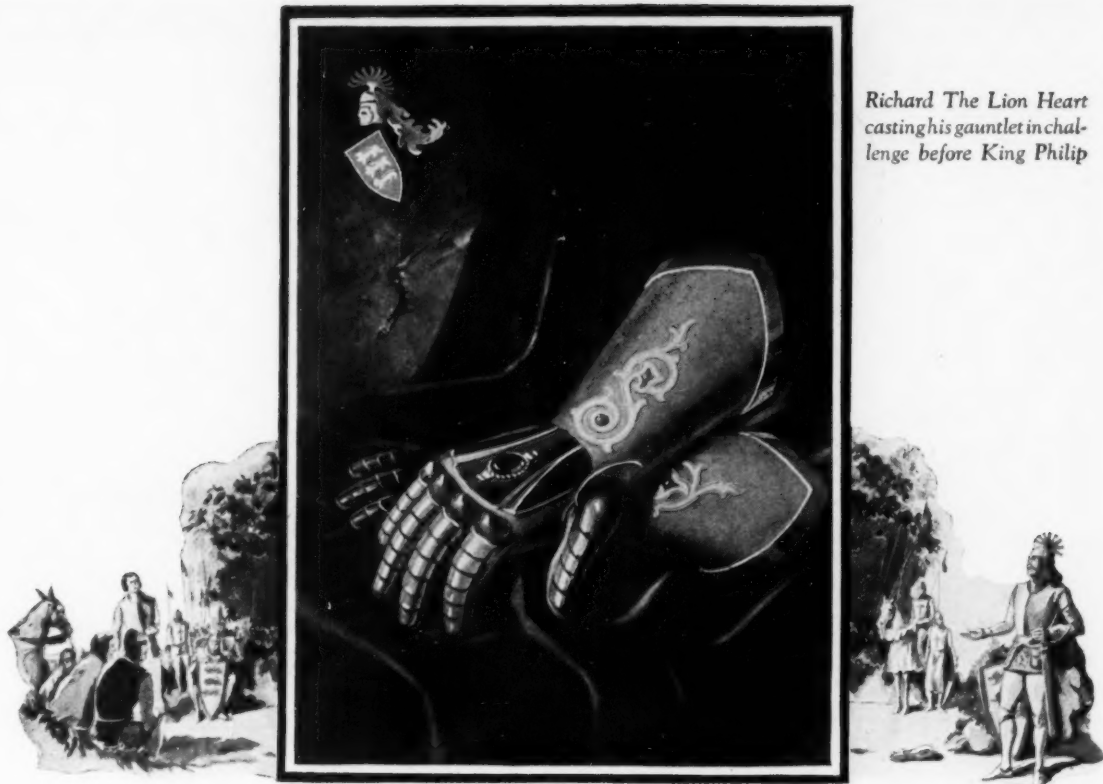
450 E. Ohio Street

Chicago, Illinois

Over 80 branch offices in the United States and Canada bring Dunham Service as close to you as your telephone. Consult your local directory. Dunham engineers are at your service with complete and authoritative data on improved heating to meet your individual requirements.

Many existing heating systems can be converted to Differential operation at moderate cost. These change-overs will pay for themselves. Dunham engineers will survey present systems without obligation.





Richard The Lion Heart casting his gauntlet in challenge before King Philip

Gauntlets of Richard. Painted by Ludwig Gassner

# Answering the CHALLENGE



GYMNASIUM TYPE LOCKER



TU-DOR CABINET

THE mailed gauntlet in the day of Richard The Lion Heart was significant of a challenge. Today—in schools, the challenge for products of beauty and final economy is answered in steel—with Lyon Metal Products.

Lockers for corridors and gymnasiums; cabinets for offices and class rooms; folding chairs for auditoriums and special classes; shelving and shop equipment for industrial art departments—in all of these Lyon Products you will find pleasing design and lasting satisfaction.

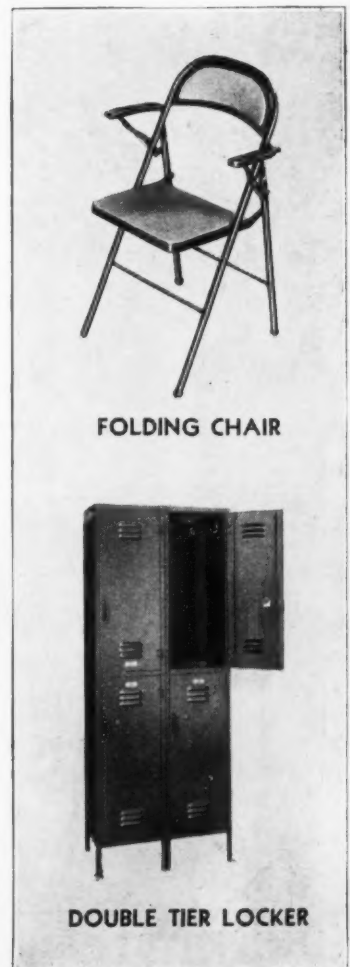
You will be interested in the brochure, "Equipment and Man Power." Your copy awaits your request.

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Converters of Sheet Steel into Practical Conveniences  
AURORA, ILLINOIS

Branches, Jobbers and Dealers in All Principal Cities

STORAGE AND DISPLAY EQUIPMENT IN STEEL  
STORE FIXTURES : COUNTERS AND SHOW CASES  
SHELVING : LOCKERS AND CABINETS  
FOLDING TABLES  
AND CHAIRS





FOLDING CHAIR

DOUBLE TIER LOCKER



# ALL SIZES AND STYLES OF TUMBLERS




Every  Tumbler is individually selected. Inspectors carefully examine each piece for flaws, cracks, lopsidedness or other imperfections. Any defect, no matter how slight, will cause the piece to be rejected. All  Glassware must come to you in perfect condition.

No. 5 of a series of advertisements



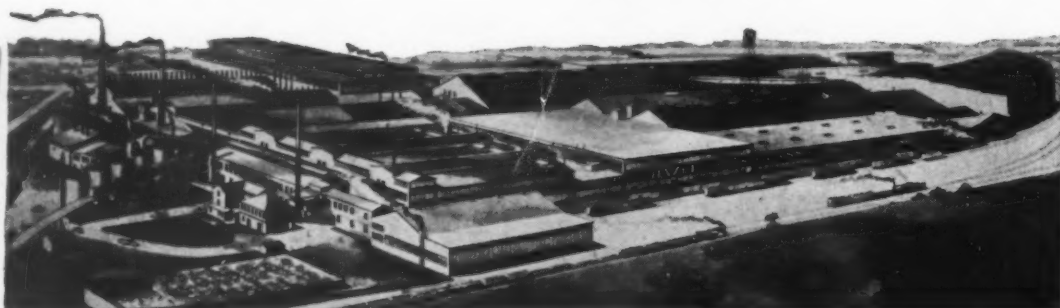
**A**LL  TUMBLERS are strongly constructed and clear in color. Glazed edges and smooth bottoms are other features. Our immense production and 100% automatic equipment enable you to purchase  TUMBLERS at no increase in price over other tumblers.

*Your Glassware Supply House will  
serve you with samples and prices of*  
** TESTED TUMBLERS**

THEY ARE GUARANTEED TO OUTLAST THEM ALL

**HAZEL-ATLAS GLASS CO.**

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**WORLD'S · LARGEST · TUMBLER · MANUFACTURERS**

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THE success of educational talking pictures is arousing widespread interest. It is a success based on a firm foundation. For vivid realistic films are being made that help teachers to *teach* in the most practical sense of the word.

Fundamental research work that starts with the selection of the authorities to supervise the pictures is being carried on. Group judgment rather than individual judgment is being brought to bear in this selection.

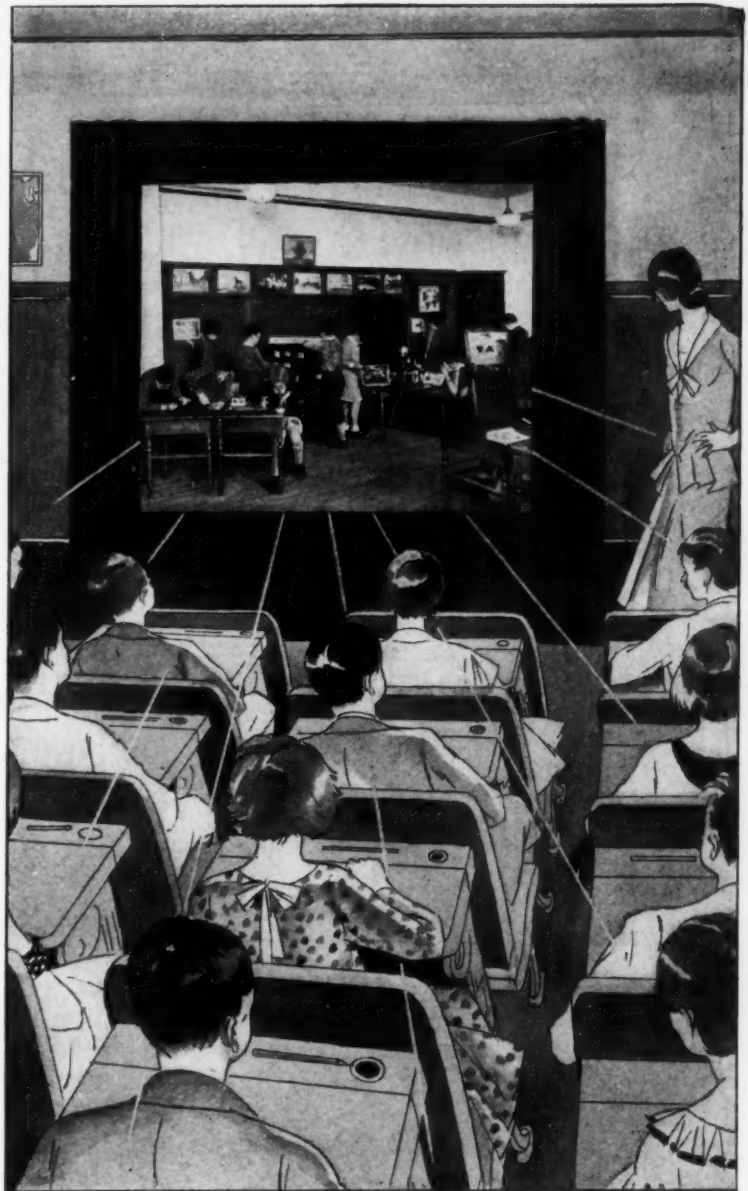
Pictures are being tested to determine their place in a definite teaching plan. Electrical Research Products Inc. are cooperating with educators in developing this medium.

***Electrical Research Products Inc.***

*Distributors of*

***Western Electric***

PORTABLE TALKING PICTURE EQUIPMENT



Scene from "A Case for Professional Study, Grade 6."

Electrical Research Products Inc. are distributors for Western Electric, making available for educational use portable talking picture equipment manufactured by the makers of your telephone.

Send the coupon for further information. Find out where you can hear and see a demonstration of educational talking pictures reproduced by Western Electric apparatus.

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N.S.-1

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Please send booklet telling how I can use Talking Pictures.

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*Fulfill all requirements*

Specify—"INTER-TWILL" because . . . there are more years of service in these window shades. It is a TWILL woven fabric of exceptional strength. "Inter-twill" shades are washable.

*If total exclusion of light is desired, specify Interstate "NO-LITE" Shade Cloth. Shadowless and light-proof in all colors including light colors and white.*

*Made in the color tone of your choosing*

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has become an integral part of present day essential school equipment. It is important to the school official to know that he can put his library requirements into our hands with the feeling that the orders will be cared for completely and correctly to the last detail. ☛ We specialize in the library branch of the book business, handling library orders from many hundreds of School Boards and Colleges from all parts of the country. ☛ Satisfactory service and liberal discounts. ☛ Send us your next order, large or small, and avail yourself of the advantages which we offer to your Board.

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Junior Business Training?  
Where does the emphasis  
belong?*

In GENERAL BUSINESS SCIENCE by Jones and Bertschi, the authors build their philosophy on the premise that

**All boys and girls are CONSUMERS  
and CITIZENS and that some of them  
will be paid WORKERS.**

## GENERAL BUSINESS SCIENCE

gives all the necessary training for jobs on the junior level of employment, and in addition, opens up the whole field of business for exploration and develops the subject in accordance with Junior High School objectives.

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It offers a complete selection of playground equipment, described in detail and pictured in actual colors. New improvements in the design and structure of Mitchell Playground Apparatus are shown and also several new pieces of equipment which are particularly adapted to school playgrounds. Mitchell has published this catalog for you. Send for your copy today.

**MITCHELL MFG. CO.**  
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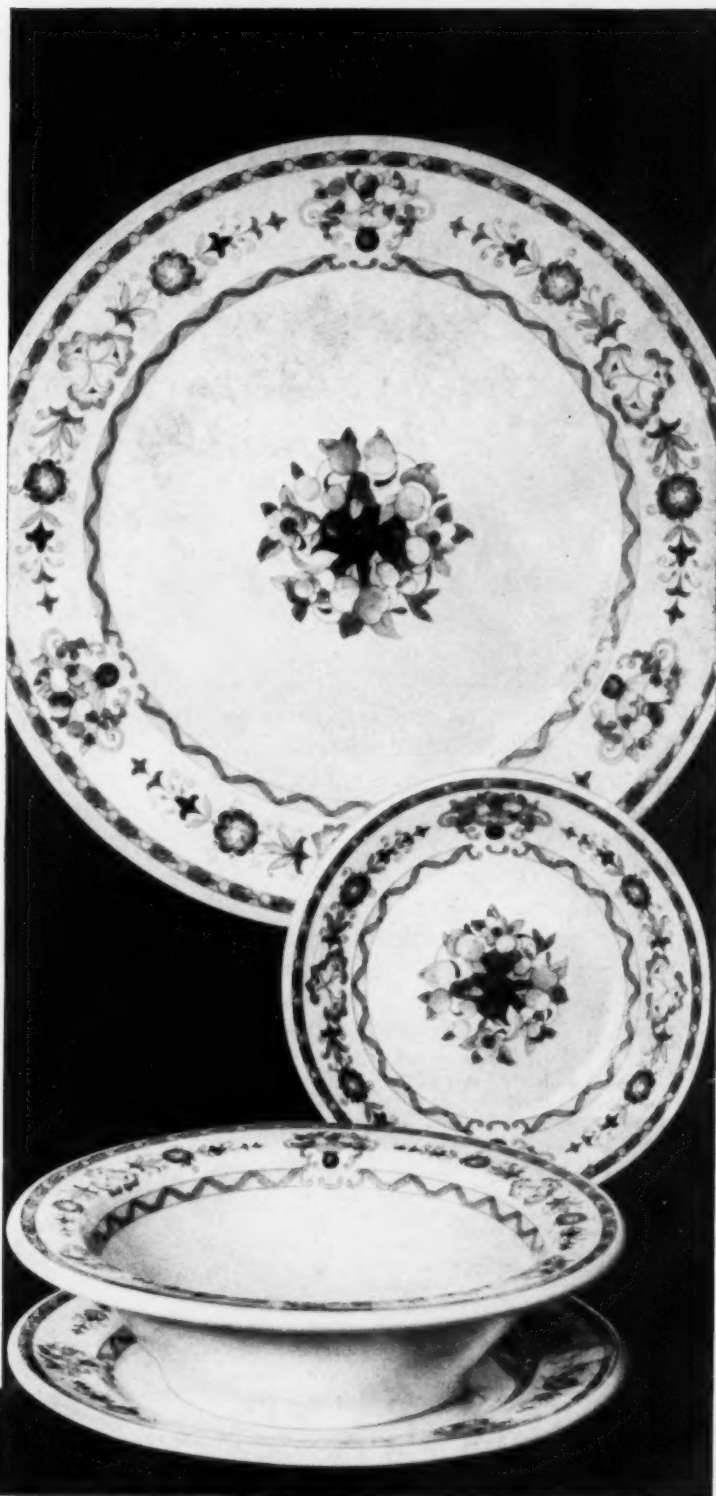
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the practical ware for schools

Experienced educators know that school dining rooms are not merely "eating-places." Here friendships are cemented and that elusive thing called "school spirit" is born and prospers. Yet only if the atmosphere is favorable. And atmosphere, in any dining room, is largely a matter of the right china service.

Nowhere is a home-like china service more essential than in a school. Realizing this, the Onondaga Pottery perfected its Old Ivory. Inherently a quality ware, Old Ivory supplies a softly gleaming ground both for the rich variety of stock patterns and for the creation of special designs. Being vitrified, its breakage is low, and—because of unique production facilities—this minimum loss can always be replaced, or the service added to, quickly and economically. These features have placed Old Ivory in numberless schools and other representative institutions.

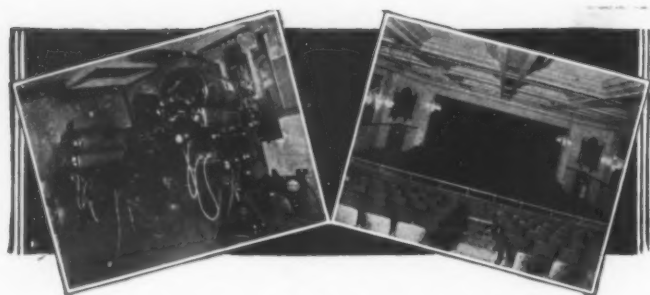
You can examine samples in a broad range of patterns, and obtain full information and prices, at nearly all institutional dealers. Or write direct to the Onondaga Pottery Company, Syracuse, New York.



*This pattern, in Old Ivory, was recently created for the  
Pittsburgh Athletic Club*

## SYRACUSE CHINA

Made by Onondaga Pottery Company

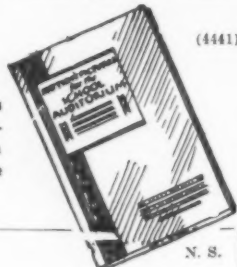


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The selection of projection equipment for the presentation of motion pictures is a problem that varies decidedly with the design and construction of each individual auditorium . . . a problem that for successful solution requires the attention of projection experts. The Educational Division of the National Theatre Supply Company offers a unique equipping service to every American School. It's staff will assist in the selection of the right equipment—will supervise its installation . . . A sure and economical means of getting the best projection results in auditorium and class room.

**Write for your copy now!**

The new booklet "Motion Pictures For The School Auditorium" discusses school projection problems in a practical, non-technical way. Write for your copy today—it's free!



(4441)

N. S.

### For Further Information—

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Complete Auditorium Equipment	Stage Curtains
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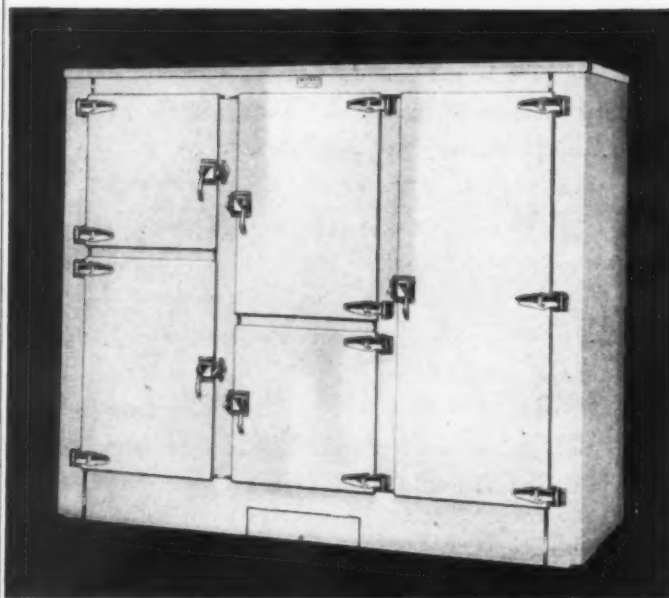
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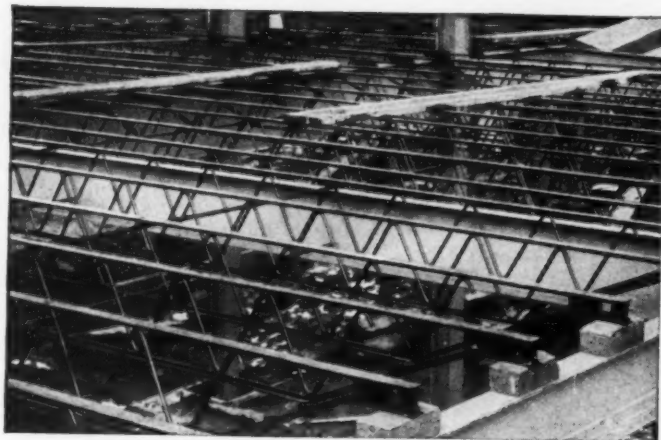
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## FIREPROOF CONSTRUCTION for MODERN SCHOOLS

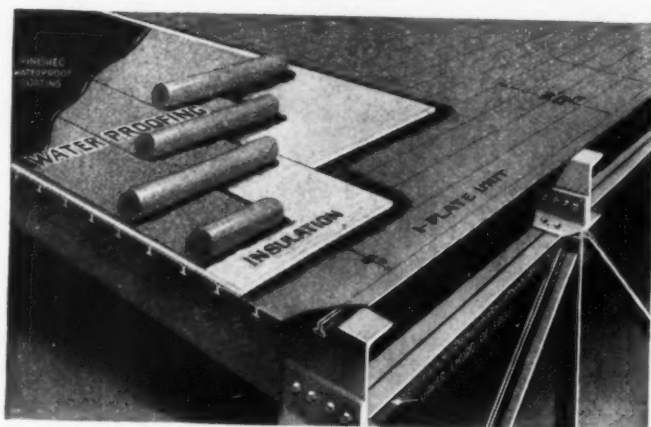


### STEEL JOISTS FOR FLOORS

Fireproof—soundproof floor construction for schools is provided economically by Truscon Steel Joists. They are completely shop fabricated and quickly erected without centering or special equipment. Three types are furnished. "O-T"—Open Truss, "P-G"—Plate Girder and Nailor Joists.

Truscon Steel Joists are designed in accordance with the specifications of The Steel Joist Institute.

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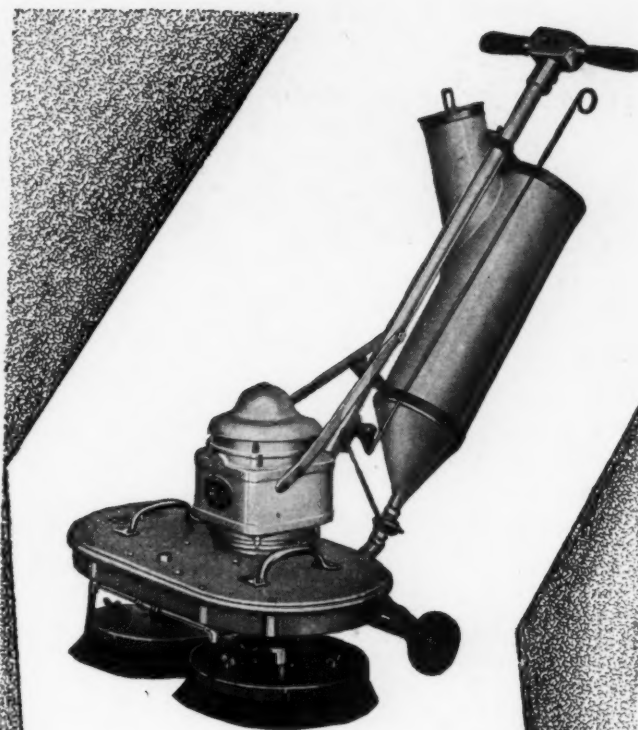
Fireproof roofs, light in weight and economical in cost, are provided by Truscon Steeldecks. They are quickly erected, insulated to any degree and waterproofed with standard roofing. Steeldecks are equally satisfactory for new schools or replacing old roofs.

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Warehouses and Offices in all Principal Cities  
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### CLEAN, SANITARY, ECONOMICAL FLOORS

With the LINCOLN Twin Disc floor machine you can have floors that are clean and sanitary—and economical as well, because "The Lincoln earns its way" by definitely lowering floor maintenance cost.

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Because machine scrubbing and polishing is so much faster than hand work, the Lincoln Twin Disc will save many times its cost in labor alone. Furthermore, its increased thoroughness will add years to the life of your floors. This is an important saving.

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Only the Lincoln has these two very important features: (1) Twin Disc, and (2) entire weight of the machine on the brushes. Without them, your investment in floor maintenance equipment will not pay you the big dividends you have the right to expect.

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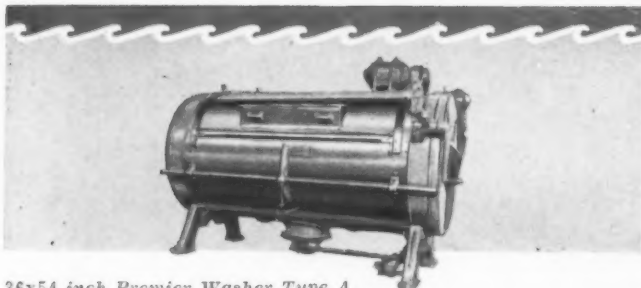
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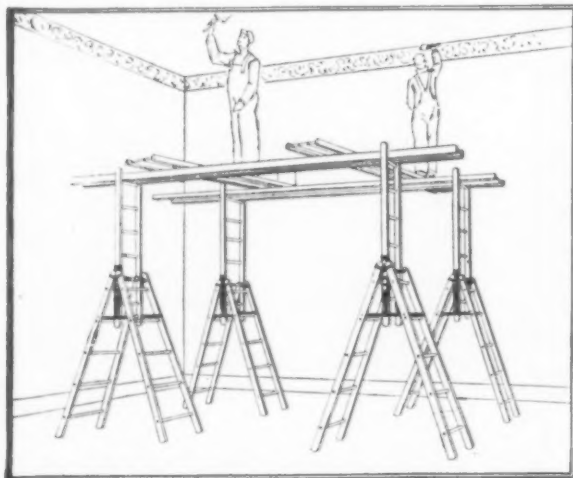
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Since 1879—The World's Pioneer Manufacturer of Laundry Machinery



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Your Mill Supplies Jobber has them. Or, write us  
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imately 700 feet of Cincinnati  
Fence Installed.

## IT WILL PAY YOU

to secure our attractive prices on ornamental iron fence, gates, entrances, and wrought iron of guaranteed quality and workmanship.

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The Cincinnati Iron Fence Company guarantees unconditionally, all labor and material and will replace or repair, free of charge, any defective material or workmanship. This guarantee is backed by 25 years' experience in the fabrication of quality wrought iron, with satisfied institution customers throughout the entire country.

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**EAGLE**  
Air Sweetening Blocs,  
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For use on different  
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Toilet Soaps  
Made in several  
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requirements. Finest  
quality, uniform  
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Economical in use.

**SELECTING** the right soap  
for cleaning your floors is important.  
Let our Floor Cleaning Experts help you.  
There is a soap in the Eagle line that will  
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# EAGLE

## SCRUB SOAPS

# School floors need Semdac Liquid Gloss

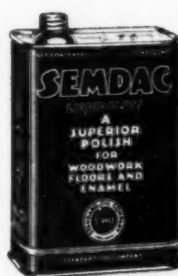
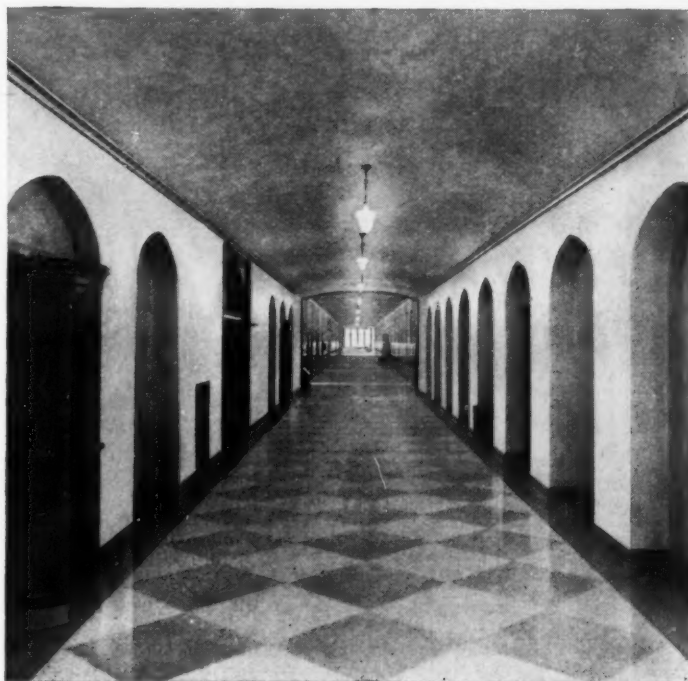
In the development of Semdac Liquid Gloss the research department of Standard Oil Company (Indiana) has incorporated every desirable feature for the treatment of school floors.

On plain wood floors, Semdac acts as an efficient preservative, keeping down dust and retarding cracking or warping. It maintains the natural color of the wood, does not leave an oily or greasy residue, and it is safe from fire hazard. Less scrubbing is necessary. The floor impregnated with Semdac absorbs little moisture. Snow, mud, dirt tracked in by the pupils do not penetrate the wood but remain on the surface where removal is easy. This brings economy in school cleaning costs.

Semdac Liquid Gloss finds universal use in the school. Its great cleansing action, its high luster, and its ease of application make it exactly suited to all school needs. Semdac can be economically purchased in barrels, half barrels, five gallon, half gallon, quarter and pint cans.

**STANDARD OIL COMPANY**  
(Indiana)

910 S. Michigan Avenue Chicago, Ill.



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Semdac Furniture Dressing is an ideal polish for the finer furniture. It leaves a brilliant durable lustre. Merely applying it removes the dirt. Gentle rubbing with one or more clean, dry cloths brings out the rich, high lustre.

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**LIQUID GLOSS ... FURNITURE DRESSING**

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Water flowing from R-S drinking fountains is pure—free from the contamination of lip contact—just a good, refreshing drink safeguarded by a patented Vertico-Slant feature. This arrangement provides a slight slant stream which prevents water from falling back upon the jet.

Let us give you complete information covering the line of Rundle-Spence Sanitary Drinking Fountains.

**RUNDLE-SPENCE MFG. CO.**  
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**DETROIT  
SCHOOLS  
ORDER  
15**

## POTTER FIRE ESCAPES

The third largest city has just ordered 15 more Potter Fire Escapes for its schools. This makes a total of 20 Potter Tubular Slide Fire Escapes in Detroit schools alone, and a total of 64 in various Michigan institutions.

The Potter is the safest fire escape made. Hospitals the country over use Potters for invalids, very old people and helpless inmates. If they are best for such institutions, they are even more ideal for school use. Potter escapes are approved by the Underwriters' Laboratories and by over 2,500 schools and institutions where they have always met every emergency perfectly. Fire drills become a pleasure instead of a danger, for sliding on a Potter is fun.

Being enclosed, Potter Fire Escapes fully protect the children regardless of ice, snow, gas, smoke, fire and water. Children slide direct to the ground from any floor up to five stories—in perfect safety. Your schools should be equipped with Potters.



Write for catalog and list of installations

**POTTER MFG. CORP.**

1861 CONWAY BLDG.

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## DRAPER ADJUSTABLE Window Shades

WITH a hygienic perfection that reflects an understanding of schoolroom lighting and ventilation needs, Draper Adjustable Window Shades stand out as the basis of school window shade comparison. Ideal for schoolroom use, because specially selected and processed material makes daylight mellow and soothing, thus preventing all glare and eyestrain. Adjustable—so that ventilation may be controlled.

Built up to a standard—not down to a price—the finest available raw material is used, with excellence of workmanship insured by nearly a quarter century of manufacturing experience. Installed in thousands of America's finest schools, board members prefer the profitable investment Draper shades afford. For illustrated catalog describing the complete Draper line of school shades, address Dept. N.S.

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COMPANY**

Spiceland

*Luther O. Draper*  
TRADE MARK

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Style V. Double  
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The name "Holtzer-Cabot" on any signaling equipment signifies the most dependable and efficient apparatus in the electrical field.

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PIONEER MANUFACTURER OF SCHOOL SIGNALING SYSTEMS

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*and Folding Partitions for Schools*

Hallway noises, clamor from adjoining rooms, etc., are definitely and completely deadened wherever Hamlin Sound-Proof doors and folding partitions are used in schools.

Scientific sound-deadening insures privacy, quiet and freedom of thought, incidentally keeping out dirt, odors, light and draft. Hamlin tight-fitting, felt-protected, scientifically constructed sound-proof, edge-tight doors are an investment that soon pays dividends in increased efficiency.

Hundreds of schools, prominent private and public buildings, etc., are "Hamlinized." It will pay you to investigate this modern method of assuring privacy and quiet.

**HAMLIN**  
**SOUND-PROOF DOORS**  
*and folding partitions*

IRVING HAMLIN, Manufacturer  
1501 Lincoln St., Evanston, Ill.

## BROWNE WINDOWS

Throughout



*Baker Laboratory, Cornell University, Ithaca, N. Y.  
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assure

## PERFECT VENTILATION

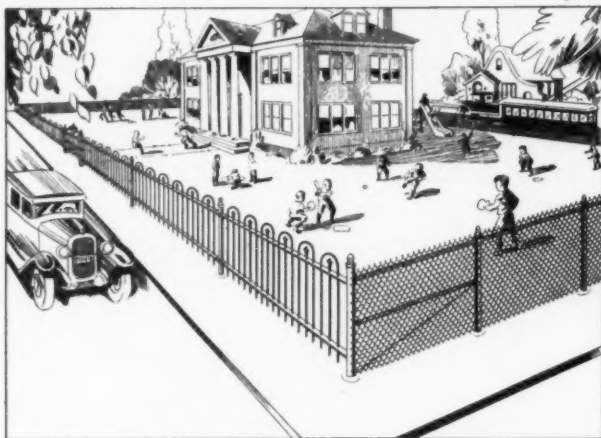
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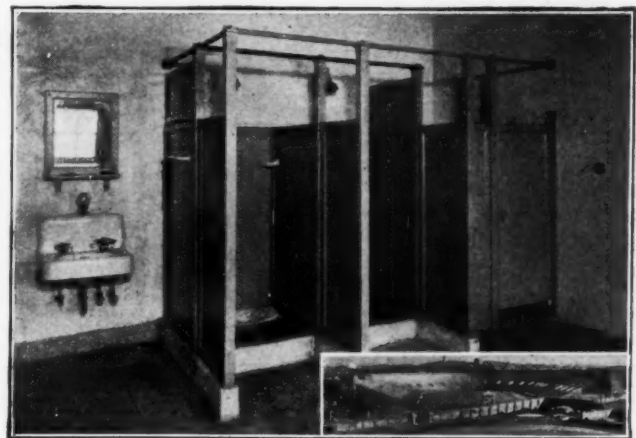
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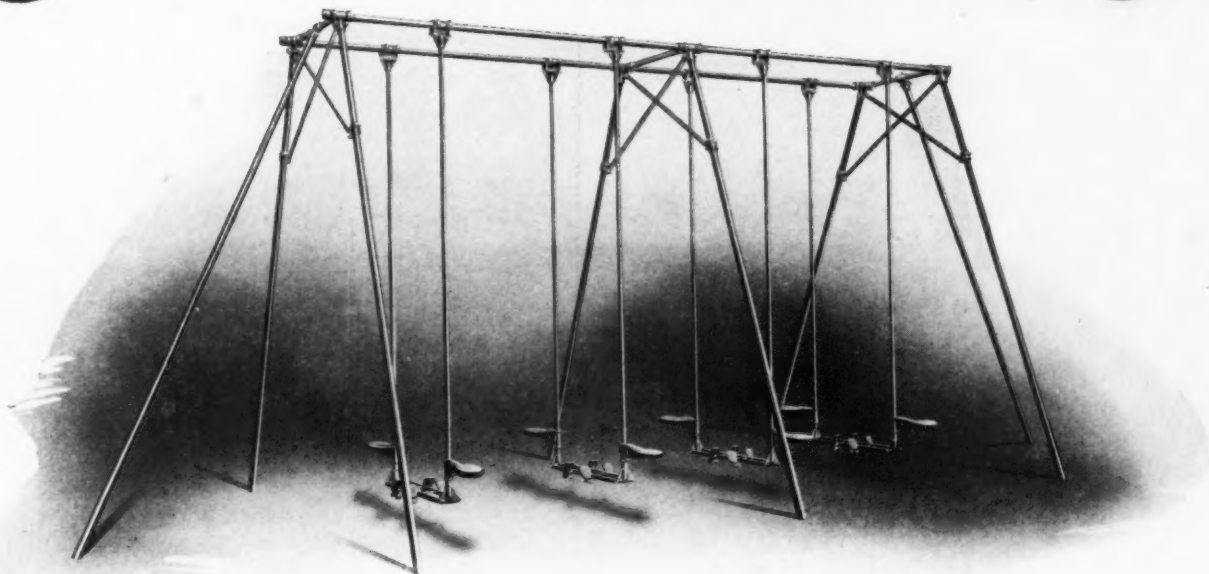


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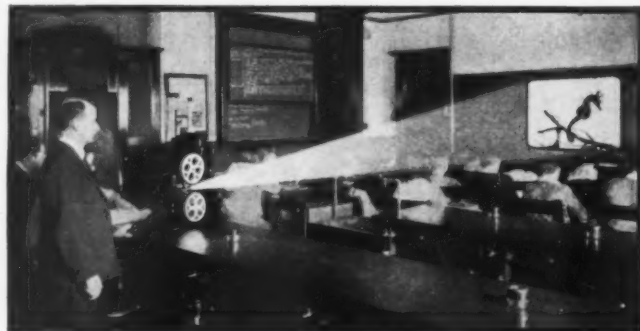
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## FILMO SCHOOL PROJECTOR *speeds learning*



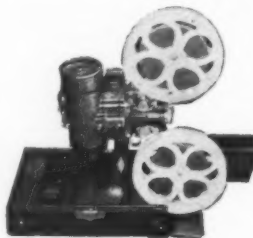
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**S**CIENCE—history—civics—any class using Filmo School Projector is bound to be hours, days, often months ahead of classes without it. It puts life in action before an entire group. It takes students to foreign ports and into inaccessible laboratories. It supplants "still" photos and lengthy explanations with living demonstrations that are instantly understood.

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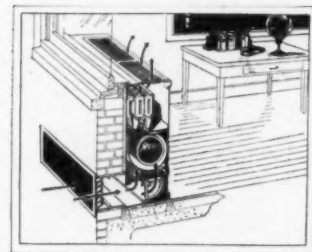
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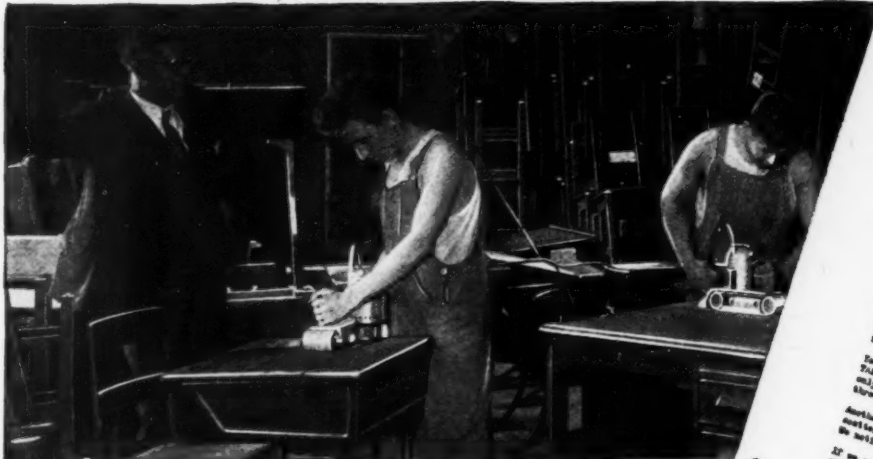
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**TAKE-ABOUT Sander**

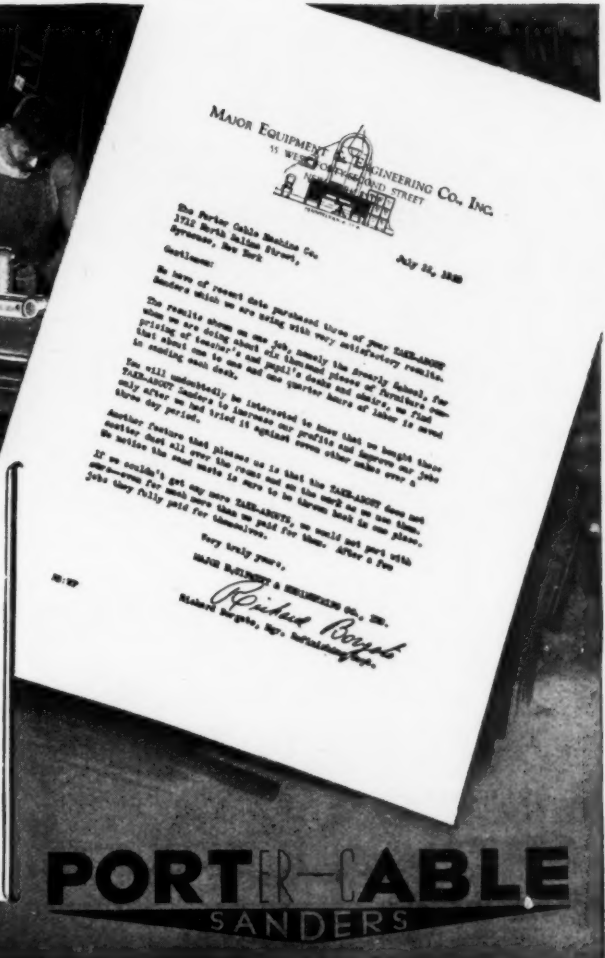
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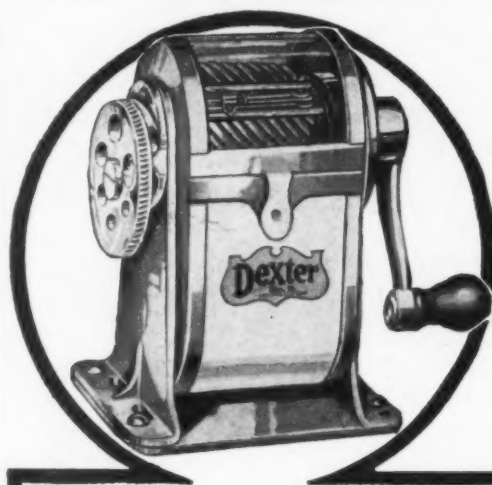
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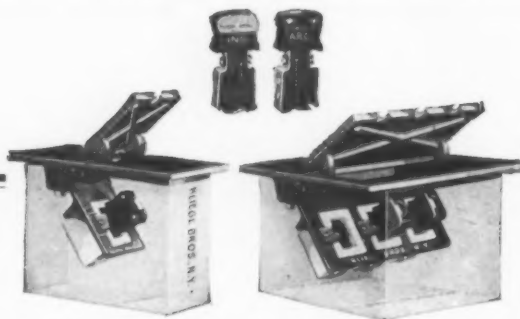
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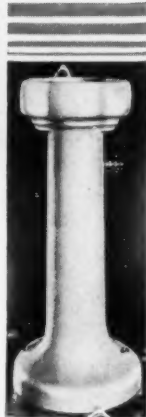


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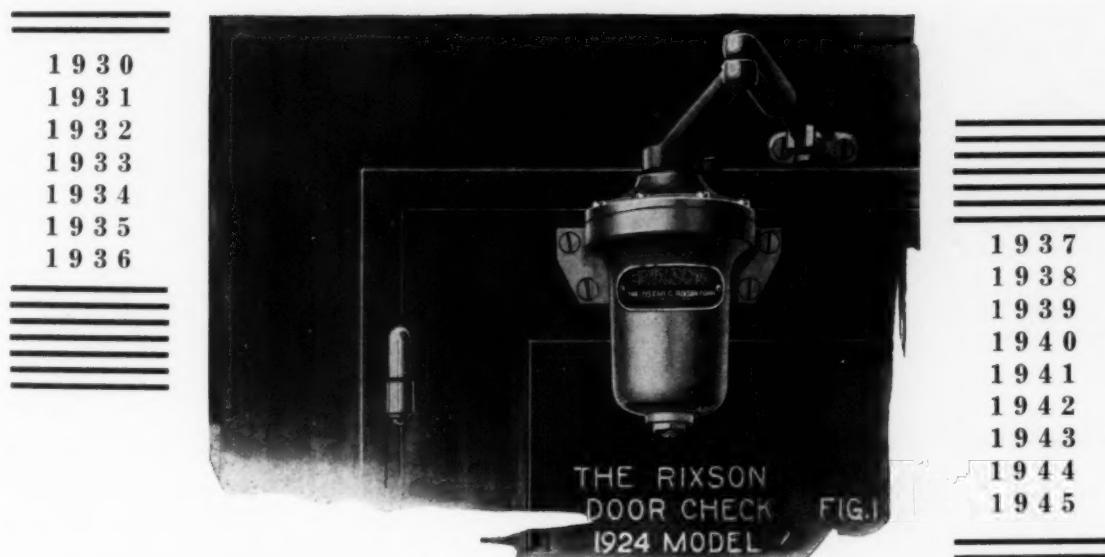
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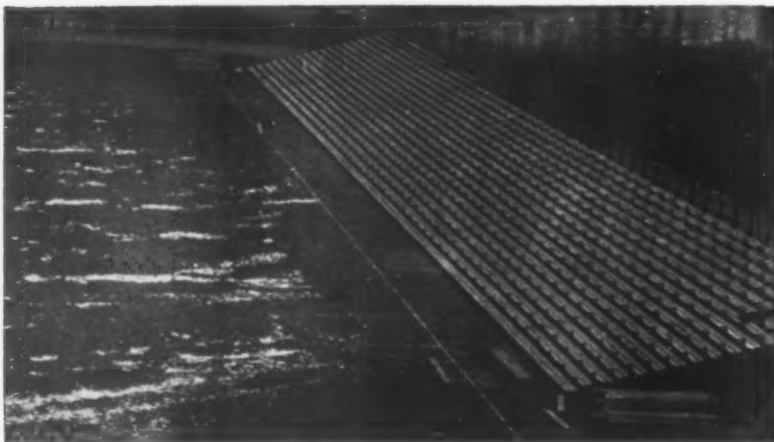
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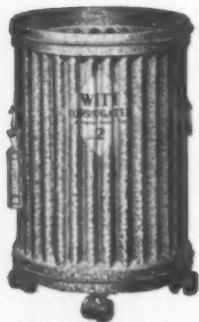
## WITT BETTER CANS

WITT Better Cans are made of highest-grade, heavy-gauge, special analysis prime steel.

Every known good can feature is incorporated in their construction.

Guaranteed to outlast 3 to 5 ordinary cans.

You can't go wrong on WITT Better Cans. There's a size and style for every need. Write for new Catalog.



WITT ROLLER CAN

### THE WITT CORNICE CO.

Can Specialists Since 1899  
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Every School Consumer  
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For the stage curtains which "include track gratis" one pays a terrific price.

Time and time again we have been called in to replace just such equipment. The result, in every instance, is another confirmed Vallen consumer.

*"The initial cost's the final cost"*



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We are always appreciative of the fact that careful design and good workmanship constitute a quality product. This is the keynote of PETERSON PERFORMANCE in Laboratory and Library Equipment . . . the large numbers of schools and colleges using PETERSON Furniture know they have selected with good judgment.



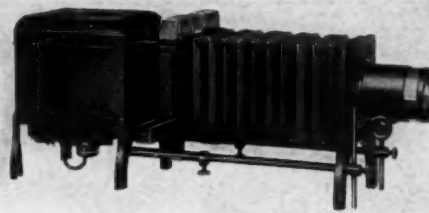
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Distributors conveniently located to serve you.



Model B  
Balopticon  
for lantern  
slides only

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THE rapidly increasing use of still projection for Visual Instruction bears witness to the many advantages of this system of teaching.

Still Projection does not hurry the instructor. Important subjects can be discussed at length. There is ample time for observation and the creation of lasting mental impressions.

Write for complete information on B & L apparatus for Still Projection.

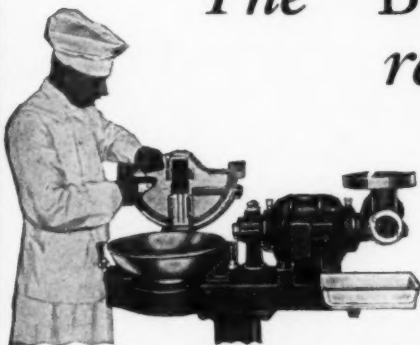
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# BAUSCH & LOMB

Makers of Orthogon Eyeglass Lenses for Better Vision

## The "BUFFALO" Chopper does reduce kitchen costs!



Model 111A (above) has removable bowl. Knives NEVER exposed. Knives can be stopped while bowl continues to revolve; 100 per cent safe to remove food from bowl; gives perfect control over food being chopped.

IN the average kitchen, it takes two or three people several hours to prepare the day's chopped foods by hand or with a grinder. A tremendous waste of time and labor!

One man and a "BUFFALO" Chopper can prepare the same amount of food in one-tenth the time. Meats, fruits or vegetables are chopped to any degree of fineness without mashing. The result is tastier, more nutritious, better quality dishes.

Leftovers can be utilized that are often thrown away, thus turning an ordinary loss into a profitable saving. These economies will pay for the chopper in a few months' time!

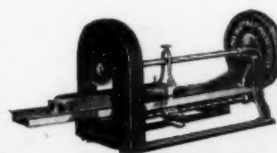
*It will pay you to install this profit-earning machine in your kitchen. Over 5000 are now in daily use. Write today for full particulars.*

John E. Smith's Sons Co., Buffalo, N. Y., U. S. A.

## "BUFFALO" Food Choppers

### "Buffalo" Bread Slicer

Cuts 175 to 200 uniform slices per minute, saving 5 to 6 slices on every loaf over hand slicing.



Saves enough bread in the average kitchen to pay for itself in 4 months' time! Hand or motor operated, two sizes.

# WORLD'S STANDARD • THROUGH SERVICE



## IN EDUCATION

**H**ALF A MILLION young typists striving to increase their speed and accuracy on the Underwood. In the schools of every nation—in the cities and far off corners of the world—in fact, wherever human thoughts and deeds are recorded—there you will find the Underwood—the standard of typewriter efficiency.



# UNDERWOOD

*The Machine of Champions*

♦♦ NEARLY 4,000,000 NOW IN USE ♦♦



# When "The Chief" questions your dish-breakage bills....

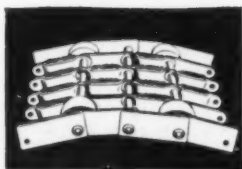
what remedy  
will you suggest?...



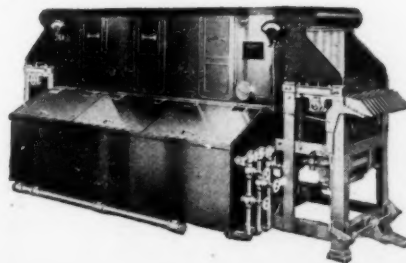
**H**AVE the answer ready. Better still, beat him to the question. Tell him that wrong dishwashing methods are responsible for these wasted profits—that a Colt Autosan Dishwashing Machine will stop this unnecessary drain, speed up service, wash all kinds of tableware quickly, safely and clean. Learn

in advance why the Colt Autosan pays these extra dividends—simplifies kitchen work and kitchen management. Let us show you how to solve these service problems as we have for Hotels, Restaurants, Hospitals, Schools and Clubs all over the country. Don't wait until you're asked. Know beforehand.

## COLT AUTOSAN Dishwashing Machine



Fibre cushioned (shock absorbing) conveyor links prevent contact of metal with tableware. An exclusive feature of Colt Straightaway Conveyor Type Autosan Machines. There's a Colt Autosan to fit every space and need—from 100 to 2000 or more persons per meal—from \$615 up. We have descriptive specification literature on each. Want them? In writing be sure to ask for "Packet M."



Model C-3,  
Conveyor Type.  
Price in Copper,  
\$3200, F.O.B.  
Factory.



64-48



**COLT'S PATENT FIRE ARMS MFG. CO.**  
AUTOSAN MACHINE DIVISION  
HARTFORD, CONN., U.S.A.

MAKERS OF FIRE ARMS, ELECTRICAL EQUIPMENT, MOULDED PLASTIC PRODUCTS, DISHWASHING AND METAL-CLEANING MACHINES.



This convenience is appreciated by teachers and students and approved by parents

## MODESS, the finest sanitary napkin, is now vendible...

IN line with the modern tendency for schools to lead in all matters connected with personal hygiene, school authorities are installing in girls' rest-rooms vendors of Modess. This superior napkin, made by Johnson & Johnson, is preferred and used exclusively in the better homes, and its selection for the schools will be accepted as evidence of a desire to supply the best.

This sanitary service, so necessary to avoidance of delay and embarrassment, is supplied at cost to girl pupils and

teachers through five-cent vendors, making it self-supporting.

The cabiner, as illustrated, is mechanically perfect and easily operated. Only the proper coin will deliver the napkin carton. When the cabiner is empty, the coin is returned. Separate lock on coin box gives double protection. Modess refills and vendors are stocked in more than one hundred distribution points.

Prompt service is guaranteed. Write for descriptive circular.

DISTRIBUTED EXCLUSIVELY IN THE UNITED STATES BY  
**ROCHESTER GERMICIDE CO.**  
Rochester, N. Y.

## Teachers Know the Strain of The Last Hour



It's the last hour of the school day that brings the greatest nerve strain. It is then that tired, uncomfortable, restless children pay less attention to studies—get into trouble and cause teachers most worry.

fortable, restless children pay less attention to studies—get into trouble and cause teachers most worry.

Avoid last hour strain on the part of pupils and nervous strain on the part of teachers, by equipping with *National Seats of Comfort* with the famous

## Moeser Extended Arm Relieves "Last Hour Strain"

In National Desks, equipped with the Moeser Extended Arm, pupils sit squarely in their seats. The back is supported when writing—working space is more than doubled—no turning to rest arm while writing—eliminates facing light and uncomfortable positions that bring on "last hour uneasiness." When writing the arm is supported, resulting in better penmanship. National Desks are shaped to conform hygienically to the human figure—they encourage correct posture—insure greatest comfort—less fatigue—less eye strain—better grades in last period classes and less worry and nerve strain on the instructor.



No. 101

Combination Desk with Moeser Arm Top. Standards finished in durable, baked enamel; woods, in Natural process finish, both in a soft brown color.

### This 10 Point Test Leads to National

- |                |                      |
|----------------|----------------------|
| 1. Health      | 6. Compactness       |
| 2. Comfort     | 7. Lasting Finish    |
| 3. Convenience | 8. Harmonious Design |
| 4. Strength    | 9. Simplicity        |
| 5. Durability  | 10. Sanitation       |

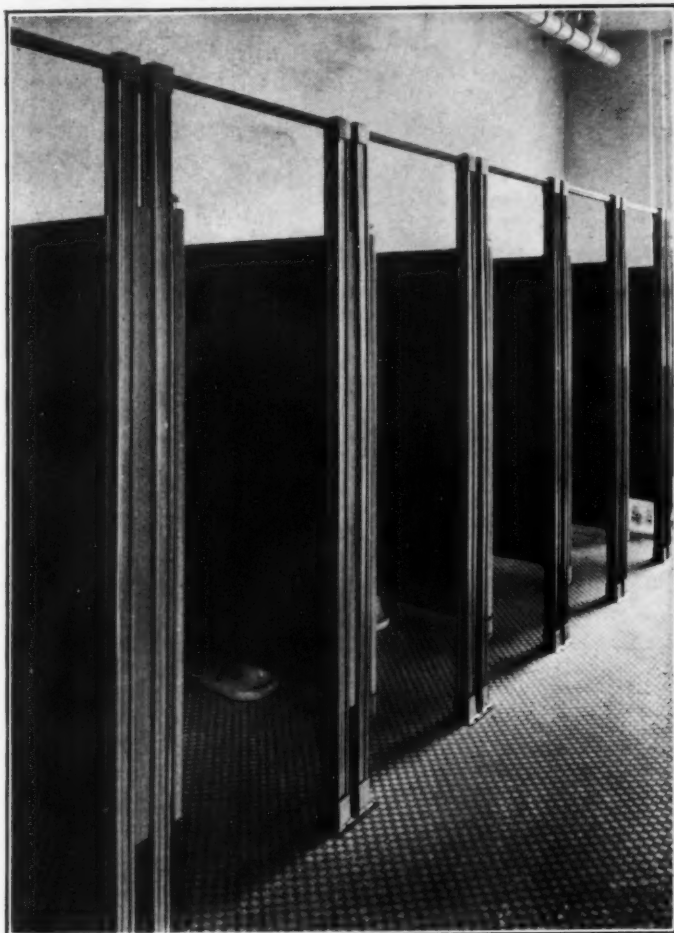
Years of collaborating with America's leading educators, together with our own exhaustive research and experiments, have resulted in equipment noticeably superior from the viewpoint of these 10 Major Tests for All School Seating.

### Write for New National Catalog

If you are a buyer of School Equipment you will want our latest catalog on School Desks. All types of school chairs and teachers' and office desks. We will send our catalog free and prepaid on request.

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Manufacturers of Complete School Equipment  
PORT WASHINGTON, WIS.

**NATIONAL School DESKS**  
"Famous for Comfort"



Lincoln School, Nutley, N. J.

## Medieval Morals Have No Place in Modern Schools

IN THE modern school toilet there is no room for medieval standard of child morals.

The picture of an average American school toilet room of a generation ago is not pleasant to recall. Dark, dingy quarters, damp, dull, soggy. A place sombrely lighted by the devil's lamp. A fit spot for the generation of much that added nothing to the moral hygiene of any adolescent human.

All that is altered now. Daylight, better sanitation—clean-cut Sanymetal steel compartments—have changed the picture. The toilet room is no longer an inviting loafing place for ingenious minds, but a place of wholesome atmosphere, in keeping with the school as a whole. What more eloquent pronouncement could be made upon the progress of Sanymetal Steel Partitions with the nation's schools?

Sanymetal Products for Schools are: Toilet, shower, dressing and urinal compartments. Corridor and smoke screens. Metal doors and wainscot. Sanymetal Gravity Hinges. Write for New Catalog No. 30.

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1722 Urbana Road, Cleveland, O.

**Sanymetal**  
STEEL  
OFFICE & TOILET  
PARTITIONS



## Remove Ashes ELECTRICALLY . . . This Safe Way

MODEL E Telescopic Electric Hoist illustrated fulfills every requirement for safety, economy and speed. With it, one man does the work of two or three. Tests have shown as many as 85 round trips for one cent current cost. . . . Many G&G Hoists have been in use over 20 years. . . . Complete G&G sidewalk door equipment shown in illustration assures full protection against accident due to sidewalk opening. When not in use, sidewalk doors close flush with pavement and lock in position. Impossible to open doors from street.

When Hoist is in use, doors lock in open position, spring guard gate completes barrier around opening. This safety equipment operates automatically. No chance for human error. . . . Follow the lead of 2,450 other Schools, Churches, and Hospitals and use this equipment. Approved by leading architects everywhere. . . . Write for catalog.

GILLIS & GEOGHEGAN  
523 West Broadway New York

The  
**G&G**  
ELECTRIC  
TELESCOPIC HOIST  
With Automatic Stop and Gravity Lowering Device



BUILT BY PEELER SPECIALISTS

# STERLING

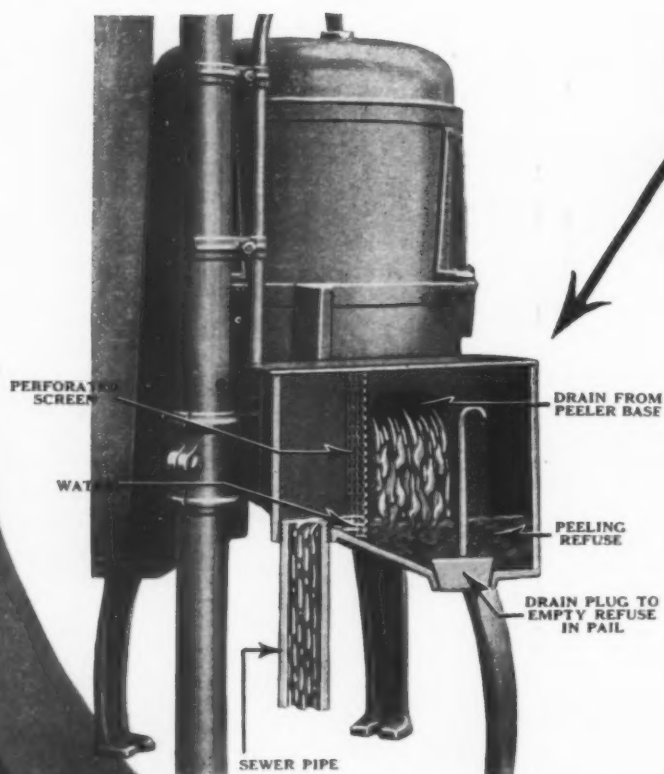
## VEGETABLE PEELERS

can be supplied at a small additional cost  
with a built-in

### PEEL TRAP

a Sterling feature that solves for all time the problem of  
**Clogged Drain Pipes**

It is not a separate accessory, but a rugged cast  
iron trap bolted directly to the Peeler Base.



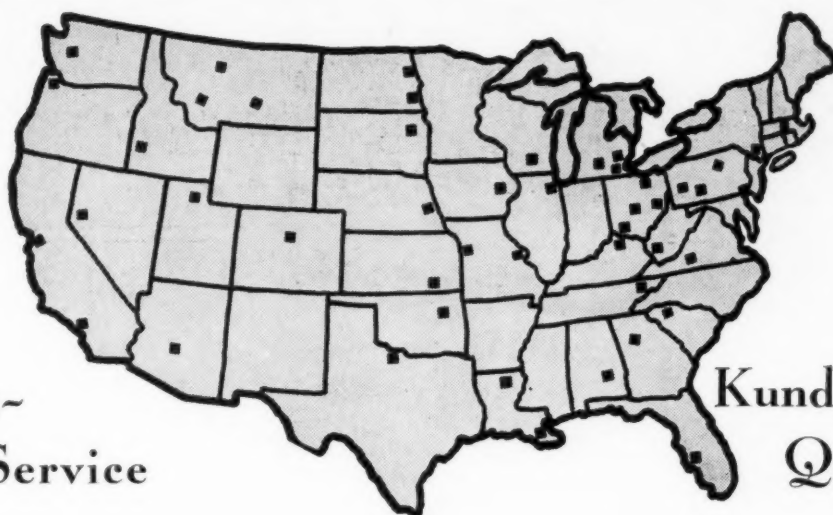
Easy to empty . . . .  
Easy to keep clean .  
Meets the require-  
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Health . . . . .

STERLING Vegetable Peelers have the greatest peeling efficiency for size and capacity with the least waste of vegetables and are the only peelers with a real Built-In Refuse Strainer.

Sold by Hotel Supply Houses Everywhere

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WHEREVER YOU ARE LOCATED, there is a Kundtz Eclipse representative nearby, to serve you with this modern school equipment . . . . . Note the illustrations below of just a few of the popular models. We will gladly send a full-line catalog (which includes auditorium seats and other Kundtz specialties). See coupon.

Expect durability and low maintenance cost in school-room equipment, when you buy Kundtz Eclipse. Correct posture, sanitation, and the many other vital features that make for efficient study and teaching, are provided by the latest Kundtz scientific features. The Theodor Kundtz Company, Cleveland, Ohio, (Division of White Sewing Machine Corporation.)



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*Adjustable Steel  
Desk and Chair* [Model No. 405]



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Kindly send me full-line catalog on your modern, improved classroom and auditorium equipment.

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# As the twig is bent . . . .



BUDDING leaves and sprouting plants tell more surely than the calendar that spring is here. Many a seedling is just starting its growth. For the boys and girls in the classrooms, it is the springtime of life. Budding tendencies determine, to a large extent, the slant of the whole future career.

Children can learn in school something more than mathematics or languages. They are affected deeply by surroundings. Clean, orderly classrooms, spick-and-span corridors, can help shape in the child, an approving attitude towards cleanliness, and sanitation. The pupil's imitative tendencies will be shown in increasing care of their own persons, in clean hands and faces, and greater observance of the niceties of dress.

### The Schools Should Set the Standard

The principal purpose of the FINNELL SYSTEM of Scrubbing and Polishing, of course, is to clean floors. But this second-

ary result, the indirect influence on character, is one of its important values for school boards to consider.

Clean floors stay clean when the FINNELL SYSTEM is used regularly. Hand methods, with their increasing expenditures and uncertain results, have been supplanted by the FINNELL in hundreds of schools throughout the country.

### An All Purpose Machine

The FINNELL serves all kinds of floors equally well—floors of wood, tile, terrazzo, linoleum—floors in corridors, gymnasium, classrooms, locker rooms. It waxes, polishes, scrubs—wet or dry—as the type of floor requires. It rotates from three to eight brushes—instead of one. It applies continuously from 30 to 100 pounds pressure instead of the one to three pounds applied intermittently by a man or a woman.

There are eight FINNELL models—an exact size to meet your requirements. Let us investigate your needs and submit an estimate of the size and type of system which will meet them economically. No obligation. Write FINNELL SYSTEM, INC., 1505 East Street, Elkhart, Ind. Branch offices in all principal cities of the United States and Canada.



This FINNELL is built for your home. A wonderful labor-saver. Light, compact, sturdy. Price and terms of purchase upon application.



*It Waxes—It Polishes—It Finishes—It Scrubs*

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